



Food. People. Planet.

Sustainability report 2021



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Introduction.



From our president and CEO

Innovating for sustainable transformation

In 2020, the world was presented with the enormous challenge of how to respond to COVID-19 as the disease spread across the globe. Global action encompassed science-based innovation at many levels, from an energetic policy reaction to new ways of organising business processes, even changing our daily routines to keep us and our families safe and protect our mental wellbeing. By clearly demonstrating how the planet, society and the economy cannot survive in isolation, the pandemic had a profound impact on our operations. The urgency created opportunities to accelerate innovation, helping us and our customers contain the shock to the food system. It also strengthened our purpose as a company: We commit to making food safe and available, everywhere. And we promise to protect what's good: protecting food, people and the planet.

Throughout the ongoing crisis, we have been focusing on core priorities: protecting people, including our own employees and those of our customers and stakeholders; and protecting food, by helping manufacturers maintain continuous food supplies and further expanding access to safe, nutritious and tasty food. In 2020 alone, over 77 billion litres of products have been sold in Tetra Pak packages.

The pandemic reminded us of the need for resilience in our food systems including providing access to food in the face of a global increase in hunger. Our packaging solutions proved critical to address these issues, as well as our processing and services capabilities. For example, we expanded our Dairy Hub initiatives including in Albania and Senegal to provide support for 39,806 farmers of which 98% were smallholders. In addition, our processing portfolio was optimised to prevent food waste and we have launched our first ever complete processing line for white cheese.



Innovation in nutrition was also key. We worked with a customer in Asia to develop a whole soybean processing solution that could capture unwanted okara – the leftover pulp from soybeans- and incorporate what would have been wasted into premium, high-fibre soy milk drinks. We utilised new digital technologies and services to extend product shelf life and reduce waste. Besides joining forces with our customers to ensure continuity of food supply during the crisis, we also strengthened our partnerships to help 64 million children receive milk or nutritious beverages in schools despite the pandemic.

At the same time, we have continued to make progress over the last year in how we protect the planet, by advancing the development of the world's most sustainable food package – a carton that is made solely from responsibly sourced renewable or recycled materials, is fully recyclable and carbon neutral.

In 2020 we also significantly stepped up both investment and collaborations across the board to realise this goal – and more partnerships mean faster solutions. Taking on board the lessons of collective action we are taking a full life cycle approach. This means four clear areas of collaborative innovation: maximising the use of renewable materials and sourcing them responsibly in a way that protects biodiversity; minimising the carbon impact of our own operations as well as the impact created by our value chain; enabling greater access to safe food while contributing to food waste reduction; and driving an active agenda to develop sustainable recycling value chains.

Renewability and decarbonising materials

Bringing the world's most sustainable food package to life requires several breakthroughs, and we are pleased to see that – despite challenging requirements – we have made significant progress on our decarbonisation roadmap. We were the world's first to introduce a package fully made from plant-based renewable materials and in 2020, we sold more than 1 billion of these carton packages. We have also produced more than 12 billion of our pioneering caps made from plant-based polymers since we introduced them to the liquid food industry in 2011 – saving more than 300,000 tonnes of CO₂ emissions in the process. Our new portfolio of tethered caps will also be made available as a plant-based option, therefore increasing the renewable content of the package while minimising litter.

Our first-generation non-foil packaging solution is now on the supermarket shelf. The protective aluminium layer has been replaced by a more environmentally-sound polymer film, cutting the carbon footprint by almost 25%. The manufacturing and processing technologies that enable this will pave the way for future developments with significantly increased renewable and fibre content.

Another key factor in protecting our interconnected world is protecting biodiversity. We do this by ensuring responsible sourcing of materials. In 2007, we pioneered the FSC™ (Forest Stewardship Council™) certification system to the liquid food carton industry. In 2020, we achieved the possibility to provide 100% of our finished packaging material as FSC™-certified to our customers. This further strengthens our voluntary certification standards, which includes Bonsucro – the industry's first certification of fully traceable plant-based polymers.

Responsible sourcing needs to go hand in hand with transparent and scientific reporting, for which we work with leading sustainability assessment platforms, such as EcoVadis and CDP. In 2020, we became the only carton packaging company to be included in the CDP leadership band for five years in a row, scoring an outstanding double “A” for climate and forests.

Decarbonising the value chain

In parallel with our packaging portfolio development, we are minimising emissions across our value chain from raw materials sourcing through to packaging end-of-life. We have successfully delivered on our 2020 climate goal, exceeding our ambition to cap our emissions at 2010 levels despite business growth – in fact, we have reduced total emissions by 19%.

Now we are working towards an even more ambitious goal: to achieve net zero greenhouse gas (GHG) emissions in our own operations by 2030, with an ambition to go net zero across the value chain by 2050. We also believe that it is not sufficient to drive actions without clear measurement. Just as data helped us to respond effectively to COVID-19, we must use science to help us address sustainability issues. As the first company in the food packaging industry to have our climate impact reduction targets approved by the Science Based Targets initiative (SBTi) back in 2017, we have also set emissions reduction targets for 2030 in line with 1.5°C across scopes 1, 2 and 3. This is what the latest climate science has told us is needed to prevent the most damaging effects of climate change.

Expanding access to safe food while reducing food waste

The pandemic revealed just how vulnerable our global food system can be. The importance of getting food to where it's needed, when it's needed – and the vital role high-performance packaging and processing plays in achieving this – has never been more apparent. And we expect this will only increase in the future, as we strive to ensure that the world's growing population has access to safe and nutritious food.

While awareness of the climate emergency has soared in recent years, many still fail to grasp how protecting the environment and expanding access to safe food are closely intertwined as priorities. The simple fact is that we need to tackle them together. The global food supply chain system is responsible for nearly one third of global GHG emissions¹. Moreover, about a third of all food produced is lost or wasted², which also carries a significant carbon footprint – 8% of global GHG emissions³. To put it another way, if food waste were a country, it would be the world's third largest emitter of emissions. Combatting food waste with our processing and services solutions is therefore a critical part of addressing the climate crisis. Through our work with customers on the Zero Waste factory we are innovating to tackle waste at the point of production. However, urgent action is required on all sides of industry, government and society to address the dichotomy between the need for greater consumption of food and the impact on natural resources – both in terms of packaging waste and food waste.

Accelerating recycling and circularity

Collaboration and partnership are especially vital to recycling, which is one of the key enablers of a low-carbon circular economy. We have worked to develop collection and recycling infrastructure across the globe for many years. This pioneering work has played a vital role in increasing the number of facilities that recycle carton packages worldwide, and we can count on over 170 recycling operations today. The number of our carton packages collected for recycling increased from 32 billion in 2010 to 49 billion in 2020.

In 2020, we continued to play an active role in the top circularity and recycling industry initiatives. For example, we are a proud member of the Consumer Goods Forum Plastic Waste Coalition for Action, along with 40 of the world's leading brands and retailers. We are a member of all workstreams, including on packaging design, extended producer responsibility (EPR) schemes and chemical recycling. Besides helping to expand collection and recycling infrastructure, we have been driving awareness programmes and creating further market opportunities for recycled materials. It's all part of our ambition – a world where all packages are collected, recycled and never become litter.

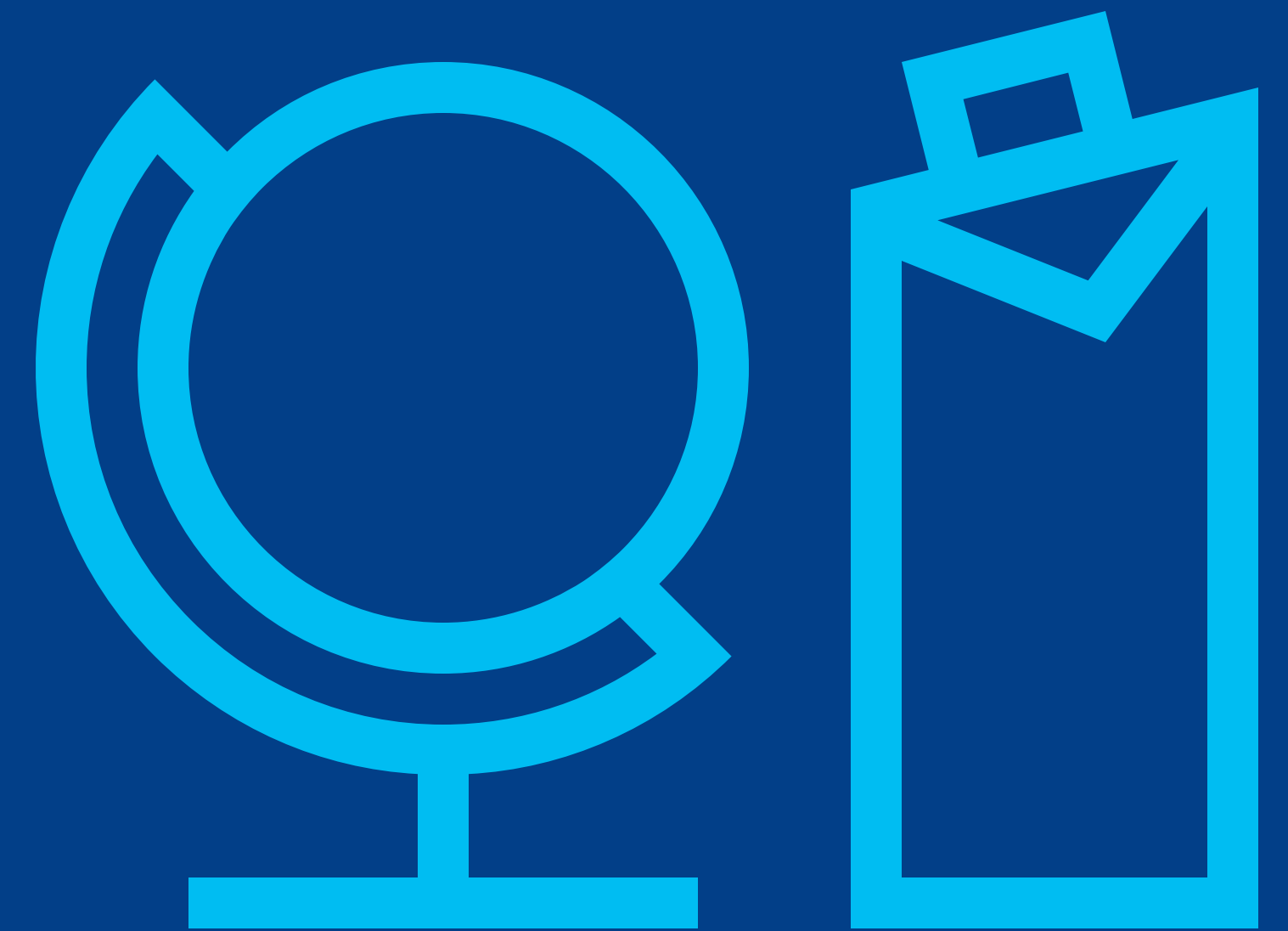
In 2020, we launched a major global communications campaign called Go nature. Go carton. By fostering debate about sustainable packaging and laying out our approach in a more transparent way it sets out our belief that sustainable, high-performance packaging is critical to help mitigate climate change and address other environmental concerns while feeding a growing population.

To this end, for the first time ever, we established an external sustainability advisory panel with six key opinion leaders from around the world. They will help shape our sustainability agenda and guide us going forward to ensure we meet external challenges, while learning and adapting so we can continue to build towards a better future. Around 70 years ago, our technology and solutions changed the rules of the game in making food safe and available, everywhere. But with the current climate crisis and the potential food security challenges, the industry needs another step change in its evolution. With a strong sustainability foundation and bold ambitions to lead the sustainability transformation, we will continue to pioneer a sustainable future that protects what's good: Food, People, Planet.

1. <http://www.fao.org/news/story/en/item/1379373/icode/>
2. www.fao.org/3/mb060e/mb060e.pdf
3. UN FAO, Food wastage footprint & climate change

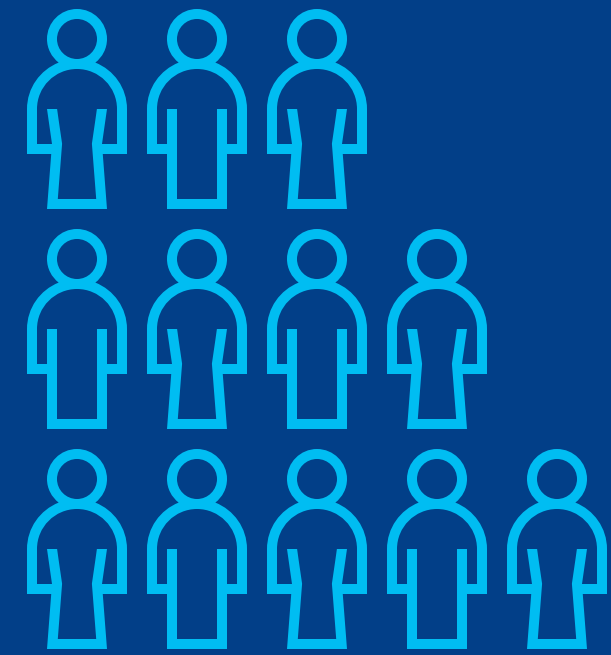
Facts and figures

Working closely with our customers and suppliers, we provide safe, innovative and environmentally sound products that each day meet the needs of hundreds of millions of people in more than 160 countries around the world.



Our company in numbers

Figures at January 1 2021



25,309
employees

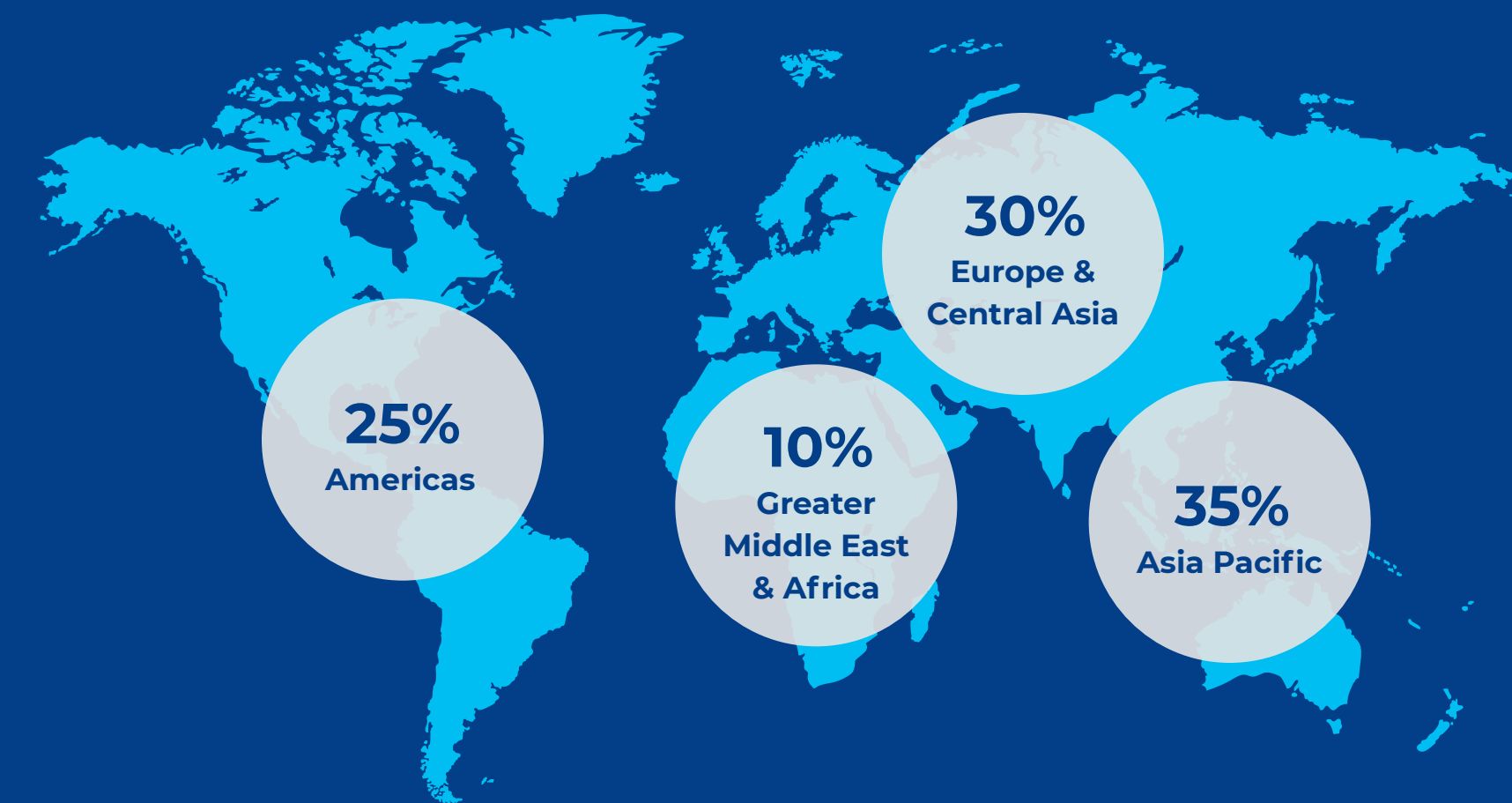


>183 billion
Tetra Pak® packages sold in 2020

8 Technical training centres	6 Customer innovation centres	8,797 Packaging machines in operation	100,981 Processing units in operation
53* Production plants	29 Market companies	93 Sales offices	6 R&D centres

* Production plants: packaging material converting factories 30, closures (caps) factories 4 (stand-alone), additional material strips & films 3, additional material straws factories 2 (stand-alone), Processing Solutions production facilities 14.

€ >10,8 billion
net sales in 2020



Net sales by category

Liquid dairy products	Juice and nectar	Dairy alternatives	Still drinks	Food	Wine and spirits
65%	12%	9%	7%	5%	2%



49 billion
carton packages recycled in 2020



> 170
recycling facilities worldwide

Our purpose

Responsible industry leadership and a sustainable approach to business are at the core of our company.

We commit to making safe food available, everywhere. And we promise to do that in a way that **PROTECTS WHAT'S GOOD™**: protecting food, people and the planet.



Our approach to sustainability

As a world-leading food processing and packaging solutions company, we work with customers and suppliers to provide safe, innovative and environmentally sound products that each day meet the needs of hundreds of millions of people in more than 160 countries.

We recognise that our future success depends on our ability to provide safe and environmentally sound products to consumers, and we commit to being socially responsible in the way that we operate across the value chain.

We have long taken a value chain approach because we recognise that we can only create a more sustainable future by addressing the interconnected nature of the environmental, social and economic challenges we face. Our solutions work because they are joined up.

We use the UN Sustainable Development Goals (SDGs) to help us prioritise our sustainability efforts and we have assigned the most relevant to each of our three sustainability pillars. This focus on the SDGs builds on our ongoing commitment to the UN Global Compact and its ten principles, to which we have been a signatory since 2004.

Our Strategy 2030, which will guide our company over the next decade, has “Lead the sustainability transformation” as one of its central pillars. The pillar comprises two goals: “Lead with low-carbon circular economy solutions” and “Enhance sustainability across the value chain”.



Food

We are committed to help shape the future with secure and sustainable food systems. Our packaging protects food, helping make safe, nutritious and flavoursome products available to more of the world's rapidly growing population. Our solutions help to prevent food loss and waste across the value chain. And our partnerships develop and sustain programmes that are helping to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture and production.



People

We strive to create a work environment that is safe, inclusive, respectful of difference and fair. And we strive to make a positive social impact along our value chain, supporting communities and conducting every aspect of our business with integrity.



Planet

We believe that businesses should make a positive impact on our planet. We develop and offer sustainable and innovative food processing and packaging solutions that can make a difference, helping protect and restore our planet's climate, resources and biodiversity. We consistently pursue actions across our full value chain that help create a sustainable tomorrow, without ever compromising on food safety or quality.

Our focus areas

As part of our sustainability approach, we undertake a materiality assessment every two years. This ensures that we keep up to date with changing sustainability priorities and that we continue to focus on the areas that deliver the greatest positive impact for our customers, our business, society and the environment. We conducted our most recent materiality assessment update in 2019. This involved a three-stage process.

1

We identified and prioritised stakeholders upstream across the supply chain, downstream and within Tetra Pak.

2

We identified and prioritised social and environmental topics applicable to the food and processing and packaging industry, taking into account the voices of all stakeholders.

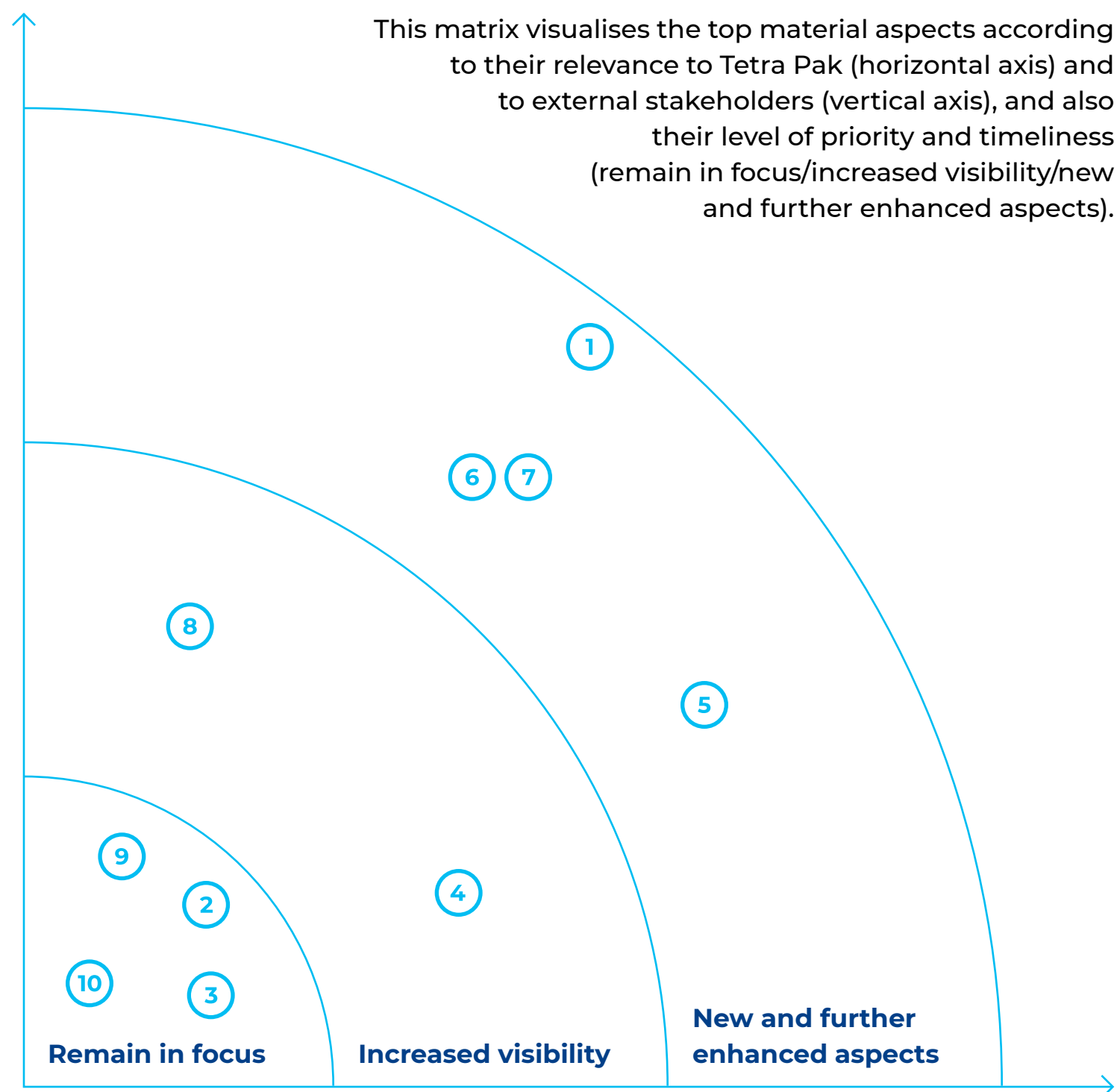
3

We applied our own expert trend analysis and forward-looking perspective to map topics against relevance to Tetra Pak and to external stakeholders.



Material aspects

The update identified ten material aspects. These are shown in the matrix below, which positions the aspects according to priority and relevance to Tetra Pak and to external stakeholders, and in the table to the right, which identifies where in the value chain they occur. These material aspects directly relate to the focus areas on which this report is based.



This table lists the ten material aspects identified in our latest materiality assessment and shows where in the value chain each one occurs.

	Material aspects	Upstream supply chain	Tetra Pak® operations	Food processing, packaging and distribution	Consumption	Post consumption
Food	1 <i>Making food safe and available</i>	✓	✓	✓	✓	✓
People	2 <i>Securing a responsible value chain</i>	✓	✓			✓
	3 <i>Promoting OHS and employee wellbeing</i>		✓			✓
	4 <i>Promoting diversity and inclusion</i>		✓			
	5 <i>Transparency/active communication in the value chain</i>	✓	✓	✓	✓	✓
Planet	6 <i>Contributing to a low-carbon society</i>	✓	✓	✓		
	7 <i>Promoting recycling and circularity</i>	✓	✓	✓	✓	✓
	8 <i>Protecting biodiversity and ecosystems</i>	✓	✓			✓
	9 <i>Maintaining fresh water availability</i>	✓	✓	✓		
Governance	10 <i>Securing a solid governance framework</i>		✓			

Our governance framework

We equate good governance with good business: we do well by doing good. Good governance is essential to building a sustainable business, delivering on our brand promise – **PROTECTS WHAT'S GOOD™** – and safeguarding our reputation.



Good governance

By providing the foundation for our strategy and approach to leadership, good governance ultimately helps us fulfil our vision to commit to making food safe and available, everywhere. Our governance framework helps us deliver on our brand promise and comply with relevant regulations and legislation, as well as guiding us to behave ethically and responsibly.

The Global Leadership Team is responsible for implementing the framework, supported by the Corporate Governance Office and a network of local governance, risk and compliance officers. As signatories to the UN Global Compact, we are committed to the implementation, disclosure and promotion of its ten principles on human rights, labour, the environment and anti-corruption. We submit a **Communication on Progress** every year.

To build trust and transparency with our customers and as part of our approach to **responsible sourcing** across our supply chain, we work with leading sustainability assessment platforms, including the Supplier Ethical Data Exchange (Sedex), EcoVadis and CDP.

In 2020, we were included in the CDP leadership band for our climate action and for driving sustainable sourcing in our forest supply chain for the fifth year in a row, and scored an outstanding double “A” for climate and forests, the only company within the carton packaging industry to be so recognised for the second year running.

We were also rated by EcoVadis in the top 1% of companies in our industry category. For more information on these ratings and our work to drive responsible sourcing and continuous improvement with our suppliers generally, see the sections on **Responsible value chain, Transparency and active communication** and **Biodiversity and forests**.





A shared responsibility

All employees, at all levels of the company, are responsible for complying with the governance framework in their everyday decisions and actions. Details of the framework are available on our intranet and a mandatory e-learning programme is in place.

Anyone in the company can anonymously report actual or suspected breaches of our Code of Business Conduct or any other unethical behaviour directly to either the Corporate Governance Officer or the Head of Audit, without being penalised in any way. Every case of a breach of our Code of Conduct is handled individually and investigated appropriately.

Communicating about our responsible business practices and performance is very important to us. We have been publishing environmental reports since 1999, and we have been reporting on broader sustainability issues since 2005. For more, see the section on **Transparency and active communication**.

A strategic approach to sustainability

Leading the sustainability transformation is one of the four pillars of our Strategy 2030. Our sustainability work and focus areas are defined by our Sustainability Forum, which comprises around ten senior leaders from across Tetra Pak who represent a wide range of areas of responsibility and are empowered to make decisions on behalf of our Global Leadership Team. The Sustainability Forum meets quarterly.

Verification is essential to our sustainability process. Our practices and performance are externally verified and our GHG emissions data is externally audited. As a partner to this report, we will publish a GRI Standards Content Index. Our GHG emissions and other data will also be published on our global website.

To see our latest environmental performance data, go to our website [➔](#)



Our advocacy work

We advocate for progressive, evidence-based policy to address societal challenges on a number of different topics. From a sustainability perspective, we advocate for:

- National recycling regulations such as extended producer responsibility (EPR) to improve recycling and reduce waste, supporting a circular economy. See the section on **Circularity and recycling**.
- Climate policies that are aligned with the highest level of ambition in the Paris Agreement to reach net zero GHG emissions by 2050. We also advocate for packaging policies to promote low-carbon materials. See the section on **Climate**.
- Responsible sourcing requirements for primary raw materials, such as our work with the Forest Stewardship Council™ (FSC™) and Bonsucro. See the section on **Biodiversity and forests**.

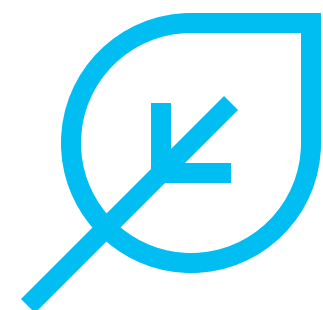
We work in partnerships and through industry and trade associations that share these same objectives see the section on **Partnerships and coalitions**; by taking part in policy events; and, where possible, by directly engaging with national governments, including ministers, department heads and members of parliament.

A call-to-action on decarbonisation

A recent example of our advocacy work is our participation last year in a virtual roundtable to discuss radically reducing carbon emissions from materials used in a wide range of industries. Also taking part were representatives from the European Youth Forum, the International Union for Conservation of Nature, the European Environment Agency and companies including Unilever and H&M.

The event was the first important step to co-create a call-to-action on the need for decarbonisation of materials that was shared with the European Commission and communicated more widely to our industry trade associations. The concept of decarbonisation and the call-to-action will also be a key component of our engagement at international forums this year, including the UN Climate Change Conference (COP26) in the UK and the UN Biodiversity Conference (COP15) in China.

We started the first wave of this work in Europe, because the EU already has an objective to achieve climate neutrality by 2050. We aim to expand the concept to the US, China, and India in due course, before widening our reach to other priority markets.



2050
climate neutral

Our partnerships and coalitions

We work with industry organisations, non-governmental and international organisations (NGOs and IGOs) and multi-stakeholder initiatives around the world to raise awareness of sustainability issues, promote good practice and support specific projects.

Below are just a few examples.

- 3R Initiative and the Circular Action Hub
- 4evergreen
- Alliance for Beverage Cartons and the Environment (ACE)
- CDP (formerly the Carbon Disclosure Project)
- Carbon Trust
- Consumer Goods Forum – Plastic Waste Coalition of Action
- Ellen MacArthur Foundation – New Plastics Economy
- Forest Stewardship Council™ (FSC™)
- Global Recycling Alliance for Beverage Cartons and the Environment (GRACE)
- Holy Grail 2.0

For a comprehensive list of our partnerships, see our website [➔](#)



Our sustainability advisory panel

Tetra Pak's Sustainability Advisory Panel was formed in 2020 to advise the company on aspects of its sustainability strategy within the business, broader industry and beyond. The panel, comprised of six independent external advisors, were selected based on their range of experience and expertise deemed necessary to shape and inform a pioneering sustainability agenda that will help us achieve our sustainability goals, including our ultimate ambition to create the world's most sustainable food package, made fully of responsibly sourced renewable or recycled materials, fully recyclable and carbon neutral.

The Advisory Panel meets quarterly.

Panel members



Dan Esty

*Hillhouse Professor
at Yale University (Chair)*

A prominent environmental lawyer and policymaker, Dan has spent much of his career researching, writing and educating people on issues relating to the environment, energy and sustainability.



Rachel Kyte

*Dean,
The Fletcher School at Tufts University*

Former special representative of the UN Secretary-General and CEO of Sustainable Energy for All, Rachel was also Vice President and Special Envoy for Climate Change at the World Bank Group.



Johan Rockström

*Director of the Potsdam Institute
for Climate Impact Research*

Johan is an internationally recognised scientist, known for co-developing the Planetary Boundaries Framework. A specialist on water resources, he is adviser to several governments.



Malini Mehra

*FRSA, chief executive,
GLOBE International secretariat*

A political scientist and gender specialist, Malini has served as adviser to Secretary-General Kofi Annan on UN civil society reform and co-authored UN Human Development Reports.



Trewin Restorick

*Founder and CEO,
Hubbub*

An environmental entrepreneur and campaigner, Trewin has acted as the Head of Fundraising for Friends of the Earth and also founded and chaired the Global Action Plan to promote sustainable living.



Changhua Wu

*CEO,
Beijing Future Innovation Center*

Widely recognised for her leadership in fighting climate change and advocating China's clean revolution, Changhua sits on various global leadership and expert councils and panels.

[Read more about our panel members on our website](#)

Our ambitions, commitments and highlights

We made strong progress in advancing our commitments to protecting food, people and planet in 2020. Over the next pages we set out some of our most significant achievements of the past year.

Our ambitions and commitments

Food

Supporting the UN SDGs



Food safety

Protecting food is at the heart of what we do. We never compromise on food safety. Period.

Our commitments

Continue to deliver and develop the technologies, processes and expertise that have created a complete, high-performance system to deliver food safely across the value chain: from food origins, into our customers' factories, through processing and packaging to distribution, on to the shelf and into the hands of consumers.

Advance our ongoing journey to continuously improve the aseptic technology, on which much of our success has been built.

Leverage new technologies, such as digitalisation and connectivity, to improve food safety, trust, transparency and traceability still further.



Food availability

Our ambition is that people of all income levels have access to affordable, safe and nutritious food everywhere in the world.

Our commitments

We commit to making food safe and available, everywhere. This is our vision: the aspirational goal that drives our organisation.

Continue to deliver high-performance food processing and packaging solutions that play a significant role in giving more people access to safe food.

Ensure that access to safe food initiatives, through our technology and solutions and active participation in school feeding programmes and implementation of Dairy Hub projects form a visible part of Tetra Pak operations, and are key to our overall purpose as an organisation.

Work with customers and partners to sustain and expand school feeding programmes worldwide.

Partner to expand Dairy Hubs in priority countries supporting customers and smallholder farmers in improving productivity.



Food loss and waste

Our ambition is to minimise food loss and food waste across the value chain.

Our commitments

Continue to develop high-performance solutions, with the goal of reducing production food loss by 50% in the best practice lines we provide to our customers by 2030 (compared with 2019).

Continue to support customer operations towards high production efficiency and food loss avoidance.

Collaborate across the full value chain helping to reduce food loss and waste, and continue to support farmers and producers in developing markets through our Dairy Hubs initiative.

Publicly advocate for resilient food system solutions that reduce food loss and waste and form or join alliances supporting the cause.

Launch new initiatives, including through collaboration with customers and other partners, to support and educate consumers in food waste reduction, as well as supporting and educating colleagues in our own organisation.

People

Supporting the UN SDGs



Responsible value chain

Our ambition is to make a positive impact along our value chain and support the communities where we operate

Our commitments

Uphold the UN Global Compact's ten principles on human rights, labour standards, the environment and anti-corruption, extending them across the value chain.

Partner with suppliers to drive down full supply chain environmental footprint and address social risks in our supply chain.

Promote commitment to science-based targets within supply chain and establish joint goals on scope 3 GHG emissions reduction.

Promote responsible and ESG/sustainability-certified and verified sources.

Maintain high responsible sourcing standards with new relevant suppliers screened using social responsibility and environmental criteria.



OHS and wellbeing

Our ambition is that all individuals are free from harm during every project and activity, while supporting the health and wellbeing of our employees.

Our commitments

Continue to drive efforts towards our ultimate goals of zero accidents and work-related ill-health.

Maintain a CEO-driven safety culture that is pervasive across the company, and constantly reinforced.

Earn recognition by employees that our company is among the best to work for.

Continue to deliver formal health and wellness programmes to employees and beyond.



Diversity and inclusion

Our ambition is to maintain a truly diverse workforce, where every employee is respected, included, engaged and fully contributing.

Our commitments

Continue to work towards the "desired state" where all our people can thrive and we see and value diversity.

Ensure all voices in the company are heard through our enlarged global diversity advisory panel and new regional panels.

Work to increase female representation in management roles and ensure that the gender balance within our organisation reflects the places where we do business and work.

Sustain investment in Future Talent Programmes.

Enable world-class training and development for all our employees.



Transparency and active communication

Our ambition is drive transparency across our value chain and to actively communicate about our sustainability activities.

Our commitments

Maintain public high-quality disclosure of environmental information through CDP.

Continue to earn high recognition and trust from communities globally that are impacted by the company's activities.

Continue to work with governments worldwide on policy issues related to sustainability, food packaging and healthy diets.

Continue to equip our employees to be sustainability ambassadors.

Planet

Supporting the UN SDGs



Climate

Our ambition is to reach climate stability through energy reduction and decarbonisation of our operations and products, as well as the full value chain.

Our commitments

Reach net zero GHG target in Tetra Pak operations by 2030 (scope 1 and 2 and business travel).

Reach net zero GHG ambition across the value chain by 2050 (scope 1, 2 and 3).

Reach -46% GHG reduction across value chain by 2030, in line with 1.5°C (SBTi commitment, baseline 2019)

Source 100% renewable electricity in our operations by 2030 in line with RE100 commitment.

Continuously increase the use of renewable materials and launch fully renewable aseptic package by 2023.

Strive to maintain our CDP Climate A-List leadership ranking.



Circularity and recycling

Our ambition is a world where all packages are collected, recycled and never become litter.

Our commitments

Reach 70% recycling rate in Europe by 2025, and 90% by 2030.

Ensure recyclable packaging according to leading definitions such as the New Plastics Economy Global Commitment by 2025.

Use 10% of polymers with recycled content in our packaging in Europe by 2025.

Expand paper straws offer and production to meet demand in Europe by 2021 and globally by 2025.

Ensure all caps and lids on all Tetra Pak cartons placed on the market in EU are tethered by July 2024

Continue our accelerated progress and increased investment towards developing the world's most sustainable food package: a carton package – made only from renewable or recycled materials, fully recyclable and carbon neutral.

Continue to work on a regional and local level to develop and scale up collection and recycling on the ground, towards a circular economy.

Continue to play an active role in the top circularity and recycling industry initiatives, and to join and/or help form new partnerships and alliances.



Biodiversity and forests

Our ambition is to conserve and restore forests and make a positive impact on biodiversity.

Our commitments

Continue to source 100% of paperboard from sustainably managed forests, 100% FSC™-certified.

Strive to maintain our CDP Forest A-List leadership ranking.

Maintain no sourcing from high conservation areas.

Continuously increase the use of polymers with renewable or recycled content targeting 20% (by weight of sourced volumes) worldwide by 2025.

Be a leader in promoting the importance of valuing natural capital beyond certifications.

Continuously improve responsible sourcing standards and pioneer new science-based approaches.

Achieve a positive impact on biodiversity through forest conservation and nature-based solutions.



Water

Our ambition is to make a positive contribution to global water resilience through water management across our operations and the full value chain.

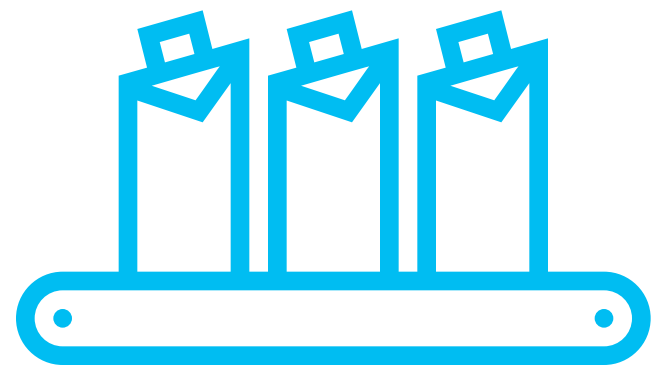
Our commitments

Achieve 50% less water consumption in the best practice lines provided to our customers by 2030 (compared with 2019).

Reduce water use in our own operations by 2030.

Continue to ensure that suppliers are working proactively on water management improvements in their operations.

Food 2020 highlights



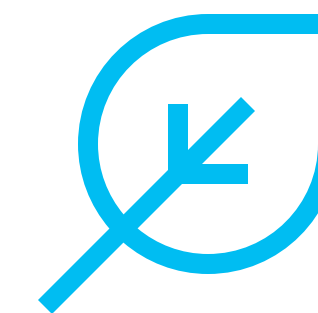
Worked in partnership with customers to **guarantee continuity of safe food supplies** throughout the COVID-19 pandemic.

We expanded our Dairy Hub initiatives, including in Albania and Senegal, to provide **support for 39,806 farmers**, of which 98% – 38,937 – were smallholders.



Worked in partnership to ensure **64 million children in 45 countries** received milk or other nutritious beverages in Tetra Pak packages in their schools, despite the pandemic.

Tetra Pak® Tubular Heat Exchanger equipment first of its type to receive certification from the European Hygienic Engineering and Design Group (EHEDG).



Joined the **European Alliance for Green Recovery**, which highlights the central role of resilient food supply chains in building a more sustainable economy across Europe.



Published Tetra Pak Index, a **major global research study** exploring consumer attitudes around food safety, food waste and the environment in the wake of the COVID-19 pandemic.

People 2020 highlights



Launched formal sustainability initiative, **“Join us in protecting the planet”**, calling on base materials suppliers to join us on our journey towards reducing GHG emissions in our supply chain by 50% by 2030.



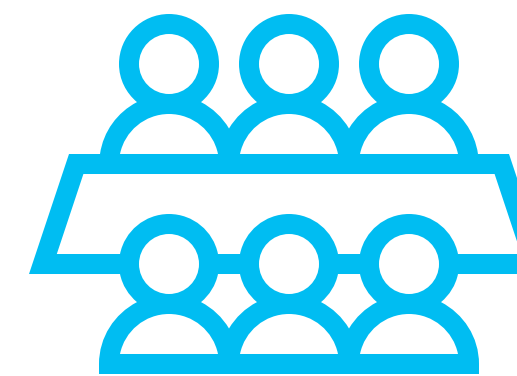
Received **“Great Place to Work” certification** after pilot applications in four countries (achieving “Top Company” status in two of these).

Launched global **Go nature. Go carton. communications campaign** to foster debate and promote sustainable packaging.



Ranked leader by CDP for fifth year running for environmental transparency and action.

Pursued a high level of worker **safety and promoted mental wellbeing** of all colleagues throughout the COVID-19 pandemic.



Expanded our **global diversity advisory panel** and established a similar panel within each of our four regional clusters, **increasing the number of colleagues involved to 65 from 15 in 2019.**

Planet 2020 highlights



Introduced carbon reduced and carbon neutral package certification and labels with Carbon Trust and launched **Tetra Rex® Plant-based package** with **carbon neutral label** in Ireland, an industry first.

Announced a **net zero climate goal** and SBTi approved science-based targets across all scopes 1, 2 & 3

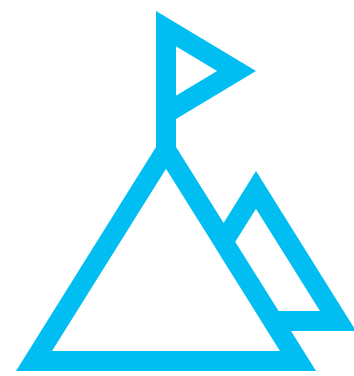


Technical validation with limited commercial launch of **first aseptic package with non-foil barrier**.

Launched **breakthrough low-energy equipment** line for processing juices and still drinks.



Led and implemented a wide range of activities across the recycling value chain in local markets around the world, contributing to **increased global carton package recycling rate of 27% in 2020**.



Achieved our 2020 climate goal, decoupling economic growth from GHG emissions across the full value chain, scope 1, 2, 3 (-19% versus 2010). Achieved an outstanding -70% GHG reduction in our own operations from 2010 to 2020, scope 1 and 2.

Dan C. Esty,
Yale University and author,
Green to Gold,
Sustainability Advisory Panel member



The response to environmental challenges will not come from any one direction or entity, but instead must reflect a portfolio approach, with a wide range of disciplines and organisations contributing their best ideas and new technologies. Business has an important role to play here. Particularly because one of the keys to progress is innovation and – as it happens – the business community is often strong in this regard. Simply put, businesses that bring a capacity for fresh thinking, problem-solving, and solutions development can be critical allies in delivering what’s needed to create a more sustainable future. Tetra Pak offers this promise and is well positioned to foster high-impact collaboration through partnerships across its entire value chain.

Food.



Food

Food safety	30
Food availability	39
Food loss and waste	48

We are committed to help shape the future with secure and sustainable food systems. Our packaging protects food, helping make safe, nutritious and flavoursome products available to more of the world’s rapidly growing population. Our solutions help to prevent food loss and waste across the value chain. And our partnerships develop and sustain programmes that are helping to end hunger, achieve food security, improve nutrition, and promote sustainable agriculture and production.

Material aspects

- *Making food safe and available*

Supporting the UN SDGs



Changhua Wu,

CEO at Beijing Future Innovation Center,
Sustainability Advisory Panel member



Emerging from the season of darkness and despair, we celebrate the dawn of light and hope, and we embrace visionary leadership and collaboration that defines a shared and sustainable human destiny. As a Chinese saying goes, food is the essence of the people. And food and food systems become the fundamental starting point to address the essence of the multiple crises, cut through the divides of politics and geopolitics, and connect the dots between planetary boundary and human wellbeing.

As a champion of integrated systemic food solutions that are built upon the foundation of a sound planetary integrity, Tetra Pak is an essential service provider that enhances protection of human rights. We often say that it takes a village to achieve zero hunger and it takes a forest for all trees to prosper. Political and geopolitical divides prove destructive and detrimental. They threaten to detail progresses made so far towards UN SDGs. Goals are set to be achieved, not to fail.

Food safety

Protecting food is at the heart of what we do. It is what our company was founded to do and remains the cornerstone of our success.

We never compromise on food safety. Period.

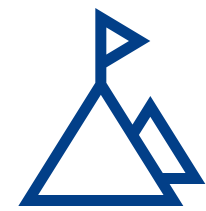


At-a-glance



Commitments

- Continue to deliver and develop the technologies, processes and expertise that have created a **complete, high-performance system to deliver food safely across the value chain**: from food origins, into our customers' factories, through processing and packaging to distribution, on to the shelf and into the hands of consumers.
- Advance our ongoing journey to continuously **improve the aseptic technology** on which much of our success has been built.
- **Leverage new technologies**, such as digitalisation and connectivity, to improve food safety, trust, transparency and traceability still further.



Achievements in 2020

- Launched **Rapid Microbial Detection (RMD) service**, offering a fast and highly accurate means of testing for bacteria that could result in product contamination.
- **Tetra Pak® Tubular Heat Exchanger** equipment first of its type to receive certification from the European Hygienic Engineering Design Group (EHEDG).
- Launched first ever **complete processing line for white cheese**, designed to ensure our high food safety standards at the same time as minimising product loss.
- Published Tetra Pak Index, a **major global research study** exploring consumer attitudes around food safety and the environment in the wake of the COVID-19 pandemic.
- Continued to work to promote the **benefits of consuming milk in aseptic packages** rather than loose milk in re-used containers as part of our ongoing **loose milk conversion** initiative.

Material aspect

Making food safe and available

Why it matters

The need for safe, healthy and nutritious food remains a global priority. According to the World Health Organization (WHO), each year more than 600 million people worldwide become ill as a result of contaminated unpackaged food, while the World Bank has predicted that food safety in low-to middle-income countries is likely to worsen before it improves, as food production transitions to modern systems.

Moreover, food safety is a major concern for consumers everywhere. The 2020 Tetra Pak Index shares findings from global research carried out in partnership with Ipsos, which shows that two-thirds of respondents said they worry about the food they buy being safe. The research also showed that consumers expect manufacturers to take responsibility for ensuring food safety, and to address the issue as a priority.

For producers, food safety means being in full control of all production parameters at all times, from the provenance of ingredients to ensuring the hygienic operation of the production to how products are packaged and shipped. Failure to fulfill responsibilities appropriately can lead to major health hazards, costly recalls, bad will, loss of reputation, and other serious financial consequences. We support our customers by sharing our industry-leading knowledge, expertise and experience in safe food processing and packaging, helping them to achieve high standards of food safety – profitably.



Our approach

Processing and packaging food safely is our core capability. Since launching the **Tetra Classic® Aseptic** carton in 1961, we have created hundreds of new packaging solutions that protect food without the need for refrigeration, keeping it safe and nutritious, while saving energy use and minimising food waste at the same time.

Today, our technologies, processes and expertise have created a complete system that makes it possible to deliver food safely right across the value chain. Food safety is at the very core of how we work and the processes and procedures that support what we do. We have a clear Food Safety Policy that commits us to maintaining our high standards of safety and achieving **full product traceability** through the entire food processing and packaging value chain. The policy is built around our core competencies, with dedicated and specialised food safety specialists embedded in all aspects of our business.

Starting with our packaging material, we follow a global specification that complies as a minimum with the standards set by the European Union, the US Food and Drug Administration (FDA), and Chinese National Standards. Furthermore, our expertise in chemicals, microbiology and sterilisation technology allows us to contribute to food safety standards that reach beyond current legislation. Our collaboration with world-leading experts, coupled with our reputation in the industry, allows us to work hand in hand with regulatory authorities.

Raising standards

Together, we help shape new norms for food processing and packaging. Under our policy, all Tetra Pak products and services are designed to ensure compliance with regulations and the intent of the Codex Alimentarius or Food Code. Codex Alimentarius is a specific collection of internationally recognised standards, codes of practice, guidelines, and other recommendations relating to foods, food production, and food safety, maintained by WHO.

As we improve the performance of our products, we also need continuously to sharpen our focus and improve capability in food safety. Product performance and food safety requires continuous attention. This is particularly true for our packaging material, and we work diligently to understand what materials are permissible to use through such practices as food migration assessments and shelf-life modelling.

We also ensure that all our processing and packaging equipment is designed with hygiene in mind, so that every material that will ever come in contact with food – from components right down to connections and welds – is built for cleanability and made of approved materials. We are a member of the European Hygienic Engineering Design Group (EHEDG), and actively support the group in developing guidelines on hygienic design.

Effective cleaning is a necessity in all food and beverage production, and critical to maintaining safety standards. We take a holistic view and structured approach to cleaning, supporting our customers with cleaning-in-place (CIP) technologies that treat cleaning as an integral part of the production process, helping them to reduce costs and keep down time to a minimum.

Automated systems such as our **IntelliCIP™ 2.0** tool continuously monitor production parameters and cleaning needs, while the CIP Recipe Editor within **Tetra Pak® PlantMaster** system creates optimised cleaning solutions for each individual plant, ensuring food safety at the lowest possible costs.

Digitalisation and connectivity

Automation and integration – of individual processes, lines or entire plants – offer many other opportunities to improve food safety and quality, while increasing production flexibility, efficiency and sustainability at the same time. Our Packaging Line Monitoring System Centre enables constant monitoring of process parameters and critical control points in filling and packaging operations, ensuring food safety, consistent quality, high throughput and minimised operating cost.

Looking ahead, our “factory of the future” concept sets out a vision of a world in which digitalisation and connectivity revolutionises the way food manufacturing plants operate.

For more on this, visit our dedicated website area, Connecting the food industry, which also houses our series of technical thought leadership papers on a number of topics, including food safety 

Traceability and transparency are becoming increasingly important in improving food safety for manufacturers and consumers. Our ambition is to achieve full product traceability through the entire food processing and packaging value chain. We are working to achieve this in a number of ways, including through automated solutions such as **Tetra Pak® PlantMaster** system, a factory-wide control system that fully and seamlessly integrates intelligence from each unit of the production line, and our **Tetra Pak® Connected Package** platform, which transforms our cartons into interactive information channels, full-scale data carriers and digital tools.

For more on the Connected Package platform, see our website [➤](#)

We are also finding new ways of implementing established food technologies such as juice pasteurisation and UHT treatment. To read more on our breakthrough new low energy processing line for juice, nectar and still drinks, see the section on **Climate**.

How we help food producers to secure food safety

Our control framework covers a range of tools for securing food safety. Food safety charts, performance and quality analyses, and automated traceability are examples of the various tools that support food producers' efforts to comply with food safety regulations and consumer demands.

Food safety charts enable food producers to identify critical controls points and set limitation values for monitoring, and monitoring intervals, so that action can be taken if the set point values are out of the defined range. Food safety charts are an important aid when implementing a HACCP (hazard analysis of critical control points) programme or a food safety management system such as ISO 22000:2018.

Quality assurance management

To safeguard food safety, it is vital to validate production procedures. We help our customers to develop structured methods for validating their food safety procedures that includes all the necessary steps from design qualification and installation qualification, to operational qualification and, finally, performance qualification. With the correct procedures, product quality and throughput can be increased, while food safety standards are maintained.

The Tetra Pak Food Protection Support team offers food producers expertise and support to enable safe, high quality, and competitive food production. With over half a century of experience in food safety management worldwide, we offer services that include independent evaluations of production lines.

For a comprehensive guide to our approach, see **“Our commitment – food safety: safe food processing solutions & equipment” on our website** [➤](#)

What we did in 2020

Rapid Microbial Detection

Our Rapid Microbial Detection (RMD) service, created in collaboration with our partner Hygiena, is now available to customers and offers a fast and highly accurate means of testing for bacteria that could result in product contamination.

All living organisms contain adenosine triphosphate (ATP) which acts as the energy carrier in the cells' metabolic process. When an enzyme is added, the ATP breaks down, emitting light. The RMD process uses a luminometer to test for this light – and, if it is present, it means there is bacteria in the sample.

Our RMD solution offers greater accuracy than conventional pH tests, which may not always detect the presence of micro-organisms. Other conventional testing methods, such as plating, provide similar levels of accuracy but typically add two to four days to the production cycle, leaving valuable inventory tied up while manufacturers wait for batches to be approved. RMD offers scope for considerable cost savings, better accuracy, and the potential to reduce the need for warehousing.

Tubular Heat Exchanger

Our **Tetra Pak® Tubular Heat Exchanger** equipment became the first of its kind to receive EHEDG certification, showing that it meets the leading food safety standards in Europe.

Tubular heat exchangers are used for the heating and cooling of liquid food, including liquid dairy products, beverages and infant formula, so they are safe for consumption. Currently, around 27,000 Tetra Pak heat exchangers are installed in customer facilities around the world.

We began testing components for the new exchanger with the EHEDG in 2018. Following initial tests, modifications were made including developing a new seal with a super-hygienic design and shape, using material approved by the US FDA and the EU. Subsequent tests were completed in 2019, and in 2020 the **Tetra Pak® Tubular Heat Exchanger** equipment received EHEDG certification – giving independent proof of its excellent cleanability and hygienic design.

Tetra Pak Index

The 2020 Tetra Pak Index revealed that the COVID-19 pandemic has increased consumer concern about food safety, with more than two-thirds of survey respondents citing it as a major issue for society. The research also showed that a majority see food safety as the responsibility of manufacturers, and believe it is the number one issue producers need to address.

[Read more about the Index on our website](#) 





Processing line for white cheese

Our first ever complete processing line for white cheese is designed to support producers looking to capitalise on opportunities in this fast-growing and dynamic sector. This closed, fully automated line solution avoids manual contact with the product, and is designed to ensure the highest food safety standards at the same time as minimising product losses.

[Read more about the new line on our website](#) 

Loose milk conversion

In Egypt, following a long-running campaign to raise consumer awareness of the benefits of consuming hygienically packaged milk rather than loose milk, the market share for packaged still white milk reached 48% in 2020 (up from 34% in 2014) while the share for loose milk declined from 66% to 52% over the same period. The number of consumers choosing ambient still packaged milk over loose milk also increased in 2020 in other countries such as Turkey as the COVID-19 pandemic drove consumer demand for products they perceived as safe and which offered a longer shelf-life, thus reducing the need for frequent shopping trips.

Spotlight

Quality analysis reduces defect rate

When a Spanish dairy found product defects in their UHT milk factory during routine sampling in 2020, they asked us to conduct a quality analysis to identify production issues and recommend how the system could be improved.

We planned a quality analysis together with the customer, giving them the opportunity to fully understand their processes and pain points. The analysis compared the customer's processes with industry best practice in terms of production and cleaning in the filling area.



Defect rate reduction

A Tetra Pak Food Processing Specialist worked closely with the customer as part of an Integrated Service Contract to find potential issues and identify improvement opportunities.

Together with the customer, we implemented a variety of solutions to improve efficiency, quality and ultimately, food safety. These included installing new software and conducting an analysis to further improve customer processes. By working together, we helped reduce the number of defects at the UHT milk factory from more than three per million in August 2020, to zero in January 2021.

Rapid remote support during the COVID-19 pandemic

When a customer in Europe discovered elevated levels of microorganisms in their fermented dairy alternative products at the start of the COVID-19 pandemic in 2020, we quickly responded to solve the issue.

Due to the travel restrictions in place in Europe at the time, we initially provided remote support to gain a deeper understanding of the issue. Our local experts, including a Food Protection Specialist, engaged with the customer to analyse product quality data, which revealed that the issue was gradually worsening and might even affect food safety if not remedied.

In response, our team quickly worked to contain the situation until the root cause was identified. This involved implementing provisional operational routines, frequent cleaning efficiency verification and tighter quality control routines to ensure the desired final product quality.

Our Food Protection Specialist led a systematic microbiological troubleshooting exercise to identify the cause of the issue in the customer's operations. This process highlighted several improvement opportunities in different parts of the customer's plant.

The changes included optimising hygienic design in the production technology, improving maintenance in the pre-processing area, and the introduction of best operational and cleaning practices.

After the changes were agreed with the customer and implemented, quality measurements of the product showed no microbiological issues after a few weeks. This was also confirmed during a follow up six months later, when the customer clearly expressed their increased confidence in the safety and quality of their final product.

**Rapid remote
support during
pandemic
helped
customers.**



Food availability

Our ambition is that people of all income levels have access to affordable, safe and nutritious food everywhere in the world. We are committed to expanding our reach and working in partnership to develop and sustain programmes to enhance food availability.

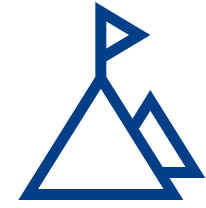


At-a-glance



Commitments

- We commit to **making food safe and available, everywhere**. This is our vision: the aspirational goal that drives our organisation.
- Continue to **deliver high-performance food processing and packaging solutions** that play a role in giving more people access to safe food.
- Ensure that **access to safe food initiatives**, through our technology and solutions and our active participation in school feeding programmes and implementation of Dairy Hubs, form a visible part of Tetra Pak operations, and are key to our overall purpose as an organisation.
- Work with customers to **sustain and expand school feeding programmes worldwide**.
- Partner to expand Dairy Hubs in priority countries supporting customers and smallholder farmers in improving productivity.



Achievements in 2020

- Worked in partnership with customers to **guarantee continuity of safe food supplies** throughout the COVID-19 pandemic.
- Worked in partnership to ensure **64 million children in 45 countries received milk or other nutritious beverages** in Tetra Pak packages in their schools, despite the pandemic.
- Our Dairy Hub initiatives provided **support for 39,806 farmers**, of which 98% – 38,937 – were smallholders.

Material aspect

Making food safe and available

Why it matters

As the world's population continues to grow rapidly, pressure is increasing on food systems. UN figures show that currently nearly 690 million people, or 8.9% of the world population, are hungry – an increase of 10 million people in one year and nearly 60 million people in five years.

Inequalities in society often make affordable and healthy diets inaccessible to the most vulnerable populations. More and more countries experience the double burden of malnutrition, where undernutrition coexists with overweight, obesity and other diet-related non-communicable diseases.

Across all types of malnutrition, the burden often falls disproportionately on the most vulnerable people: those in crisis and conflict areas, rural and remote areas and lower- and middle-income countries, minority and indigenous people, and often women and children.

Over the past year, the COVID-19 pandemic has exacerbated these global problems. It has put unprecedented stress on food supply chains, for instance through lockdowns, travel bans and safety measures that reduce productivity in food processing and distribution plants. This has led not only to food shortages, but also to price increases, which can have a major impact on the living standards of lower-income households. Combined with job losses triggered by the pandemic, this has the potential to undermine progress towards the UN SDGs.





Our approach

Our packaging protects food without the need for preservatives, additives or refrigeration, helping make safe, nutritious and flavoursome products available to more of the world's rapidly growing population, even in remote areas with no cold chain.

Our long-standing commitment to making food safe and available, everywhere includes supporting school feeding programmes. Since 1962, we have participated in the development of such initiatives, supporting our customers and collaborating with governments and other partners worldwide. We also contribute Tetra Pak resources to support the organisation of these activities.

Launched in 2011, the Dairy Hub model aims to help secure a long-term supply of locally produced, quality milk without raising the costs of collection in emerging economies. It links smallholder farmers to a dairy processor and provides relevant cooling infrastructure and technology along with training services to help increase the supply of locally produced, quality milk.

Through systemwide collaboration with our customers and partners, we offer millions more people access to safe food. We support our customers in developing and launching fortified and nutritious beverages. Working closely together, we look for innovative ways to improve formulations while maintaining the essential nutrients consumers need, at the same time as unlocking opportunities in new food categories, markets and channels.

Ensuring food availability during the COVID-19 pandemic

Throughout 2020, many of our customers faced unprecedented challenges due to supply chain disruptions caused by COVID-19 lockdowns, related travel restrictions and other factors. Right from the onset of the outbreak, we were driven by our promise to protect what's good, and took action to help prevent the health crisis turning into a food supply crisis.

Supporting customers has involved working closely with suppliers and global logistics partners to ensure timely, reliable delivery of packaging materials, spare parts and components. Use of digital technologies has enabled us to continue to provide support from technicians and service engineers, including through virtual commissioning, remote installations and remote issue resolution. We have managed to send technicians when required on site, despite increased complexity in travel due to the need to make sure that all local and WHO guidelines on travel and hygiene were followed.

For more on how we served our customers to ensure food supply during the pandemic, see our website [➔](#)

In addition to affecting supply chains, the pandemic significantly impacted on demand, as consumer needs changed. Consequently, we helped customers to change their product mix and step up production to meet higher demand for ambient, family-sized packs, culinary and other products.

In India, for example, we worked with our customer Amul to immediately expand production capacity to meet unprecedented consumer demand for UHT milk. We also came up with an innovative solution to free up capacity for a producer of a specialised beverage used in the treatment of COVID patients.

More generally, in the first months of the pandemic in Europe we delivered 12% more packaging than in the same period in 2019, demonstrating the success of our efforts to build food chain resilience.

We also launched a new “travel-free trial” service at our Lund Product Development Centre (PDC), which focuses on dairy, beverage and prepared food applications, as well as processed cheese and ice-cream mixes. The online service features all the PDC facilities, personnel and expertise, together with a trial leader to represent the customer throughout, and an audio/video director to ensure the best visual experience. The new service has the added benefit of reducing the need for travel, thereby saving GHG emissions. For more on this, see the section on **Climate**.

To find out more about how we supported our customers during the pandemic, go to our website [➔](#)

School feeding programmes

School feeding and nutrition programmes have been shown to be effective in delivering improved nutrition and better educational outcomes, supporting local agriculture and promoting economic development. School feeding is a good investment: a study based on World Food Programme (WFP) school feeding programmes in 14 countries reported an economic return of between US\$3 and US\$9 for every US\$1 invested. They are also making a significant contribution to the UN SDGs, in particular SDGs 2, 3, 4, 8 and 10.

Effective practical implementation is key to achieving the best possible results. In those parts of the world that face significant challenges in infrastructure and logistics, our food processing and packaging technology plays a vital role in helping to ensure that children can access safe nutrition in schools.

An experienced partner

We offer our customers and partners technical assistance and practical support in implementation and evaluation, and advise on best practices for food safety and quality control. Through collaboration and partnerships, for example with UN agencies, governments, NGOs and international aid agencies, we share knowledge and best practice drawn from programmes worldwide.

We have a strong background in supporting our customers in developing and launching new fortified and nutritious beverages for programmes. Environmental education and best practice in recycling carton packages also form an important part of the support we offer.

What we did in 2020

In 2020, 64 million children in 45 countries received milk or other nutritious beverages in Tetra Pak packages via school feeding programmes at some point during the year.

The COVID-19 pandemic and associated school shutdowns had a very significant impact on school feeding programmes causing food delivery disruptions everywhere, and some countries were unable to deliver at all compared with 2019, where 68 million children in 56 countries received nutritious beverages in Tetra Pak packages in schools. The WFP estimates that 264 million children did not have access to regular school feeding and nutrition services as a result of the pandemic, leaving many of the most vulnerable in a precarious situation.

In response, innovative solutions were rapidly developed. While our aseptic technology played a vital role in ensuring and enabling safe distribution to schoolchildren, we also supported our customers and worked in collaboration with governments, NGOs and UN agencies in finding practical solutions to the challenges presented by the pandemic by continuously sharing knowledge, expertise and best practice examples.

Some of the alternative distribution solutions put in place to ensure that school feeding programmes could continue to deliver food safely to children include:

- In China, an online ordering system was set up with milk delivered to secure storage cabinets which parents could unlock using a password sent to their mobile phones.
- In Japan, school feeding programme food service operators offered take-away meals at discounted prices, for collection by parents.
- In a number of states in India, the Mid-Day Meal Scheme was adapted so that milk and ingredients were sent to children's homes instead of being cooked in school kitchens.

[Read the India case study in full on our website](#) 

- In Peru, the Ministry of Development and Social Inclusion has worked with the air force to deliver more than 18 tonnes of food – including UHT milk – to remote schools in the Amazon.

Despite the challenges caused by the pandemic, school feeding programmes also ensured the entire dairy value chain continued to function. This has been important for many rural communities around the world, as dairy production plays a key role in supporting the livelihoods of smallholder farming communities.

[Read more about our work with partners during the pandemic on our website](#) 

A close-up photograph of two young girls in school uniforms. They are wearing white headscarves and colorful shirts. The girl on the left is smiling broadly and holding a Tetra Pak milk carton. The girl on the right is looking directly at the camera with a slight smile, also holding a Tetra Pak milk carton. The background is slightly blurred, showing other students in a school setting.

**We work
with customers
and partners
to sustain
and expand
school feeding
programmes.**

Dairy Hubs

Global demand for milk is set to overtake supply within the next decade. In the long term, the dairy industry is facing a persistent gap between supply and demand – a supply deficit fuelled by population growth and rising prosperity and urbanisation, particularly in Africa, Asia and Latin America.

As nearly 1 billion people live on dairy farms, smallholdings or in landless households keeping one or a few animals, the dairy industry holds huge potential to create jobs and increased incomes right the way along the value chain.

According to the International Farm Comparison Network (IFCN), of the 920 million tonnes of milk produced globally, 377 million tonnes are produced by smallholder farmers. Much of that milk is not formally processed, and can be lost, thus limiting their access to market and contributing to the global problem of food loss and waste.

Through the Dairy Hub model, we help to build sustainable value chains by linking smallholder farmers with dedicated processors in a selected area. We provide technical assistance and “hands-on” practical knowledge transfer through our international dairy experts.

More access for smallholders

By providing smallholder farmers with training and setting up appropriate cooling infrastructure and technology, dairy processors in developing markets can increase their stable supply of locally produced quality milk. This helps them to grow their business and increase profitability by creating a more efficient local supply chain. At the same time, thousands of smallholder farmers gain access to market for their milk, improving their livelihoods.

What we did in 2020

The number of dairy farmers supported by Dairy Hubs continued to grow in 2020. In all, we worked with 39,806 farmers in active projects, of which 98% – 38,937 – were smallholders. Since the initiative was launched in Bangladesh in 2011, more than 54,000 smallholder farmers have been supported by Dairy Hub projects around the world.

Individual Dairy Hub projects also developed and expanded this year. In Albania (see [Spotlight](#) story), our three-year technical assistance project with dairy processors AgroAl & Global Services (AGS) and Lufra began delivering results. The project aims to develop a formal milk collection infrastructure, improve milk quality and food safety and increase the incomes of more than 3,000 smallholder farmers. To date, incomes have increased by 92% from US\$248.40 to US\$477.90 per month on reference farms.

In Senegal, Tetra Pak West Africa and Tetra Laval Food for Development are working in collaboration with the International Finance Corporation, Sense, and local dairy processor SIAGRO to support the development of a sustainable value chain for locally produced fresh milk.

Since the Senegal Dairy Hub was first set up, milk collection has increased 246 per cent from 12,900 litres to 44,670 litres, while monthly incomes for farmers have risen 109 per cent from US\$120.90 to US\$253.20 on reference farms.

Farmers in Senegal were also among the many around the world to participate in the remote online training programme developed by Tetra Laval Food for Development in response to the travel and other restrictions imposed as a result of the COVID-19 pandemic. Using a “train the trainer” model, the programme aims to equip Extension Service Officers – employed by our customers – to continue supporting smallholder farmers by giving them technical assistance and sharing best practice.

Around 90 Extension Service Officers in ten Dairy Hub projects covering 36,420 smallholder farmers have been invited to participate, and the response has been extremely positive. “Distance training has been more than beneficial,” says Djibril Seck, Milk Procurement Manager with our partner SIAGRO in Senegal. “The modules developed were of high quality and are applied directly on the farms. A big thank you to the entire Food for Development team for the continuous support and search for solutions for the achievement of our milk collection objectives.”

[Read the Senegal case study in full on our website](#) 

[Find out more about remote Dairy Hub training on our website](#) 

Spotlight

Dairy Hubs deliver results in Albania

Albania is keen to develop its agricultural sector, having low milk production yields per cow with only about half of the milk produced being formally processed. To support this development, Tetra Pak and Tetra Laval Food for Development entered into a three-year technical assistance project with dairy processors AGS and Lufra to establish the first Dairy Hubs in Albania.



92% increase in income per farm

Since loose milk is still being consumed in the market, the project will aim to improve milk quality and food safety by linking farmers to a formal dairy value chain. After 16 months, the supply of milk to Lufra has increased by almost 42%, from 60,000 to 85,000 litres per day. Smallholder farmer income has also increased 92% from US\$248.40 to US\$477.90 per month on reference farms.

According to the IFCN, milk in Albania is mainly produced by smallholder farmers and the average dairy farm has 1.7 cows. Yields are low with an average of 3 tons per cow per year, less than a third of what an average Swedish cow produces. The UN Food and Agriculture Organization (FAO) estimates 45% of local milk consumed is unprocessed, often sold as loose milk directly to households. Food safety is an issue as the milk is not safely processed and packed, it gets spoiled quickly and exposes consumers to health risks.

3,000 smallholder dairy farmers to be enrolled

The initiative is focused on developing a formal milk collection infrastructure and providing technical assistance to smallholder dairy farmers. By setting up the first Dairy Hub more than 3,000 smallholder dairy farmers will be enrolled. The objective of this initiative is to help smallholder farmers to increase their income and lift them out of poverty. Through the Tetra Laval Food for Development team's dairy farm specialists, technical assistance is provided to train extension officers (staff of the dairy processors), farmers and school milk stakeholders. All of the milk produced is being purchased by the dairy processors, thus providing a secure income for the farmers and an opportunity to grow and develop their business.

So far, the results are promising. AGS and Lufra have invested in new cooling centres for collection of milk and have hired extension staff and veterinarians to support the farmers. The supply of milk to the processors is increasing and milk quality is improving. After 16 months, the supply of milk to Lufra has increased by 41.6%, from 60,000 to 85,000 litres per day. In the reference farms supplying AGS, milk production has increased by 119%, from an average of 24.9 to 54.5 litres per farm per day after seven months of training. Smallholder farmer income has also increased 92% from US\$248.40 to US\$477.90 per farm per month.

Food loss and waste

Our ambition is to minimise food loss and food waste across the value chain, by supporting farmers in developing markets, working with our customers to optimise their operations, developing high-performance food processing solutions and creating food packaging solutions that help consumers to reduce food waste. In this, we are helping to mitigate climate change and relieve pressure on natural resources, as well as increasing efficiency and reducing costs.



At-a-glance



Commitments

- Continue to develop **high-performance solutions** with the goal of reducing production food loss by 50% in the best practice lines we provide to our customers by 2030 (compared with 2019).
- Continue to support customer operations towards **high production efficiency and food loss avoidance**.
- Collaborate across the full value chain helping to **reduce food loss and waste**, and continue to support farmers and producers in developing markets through our Dairy Hubs initiative.
- Publicly advocate for **resilient food system solutions** that reduce food loss and waste and form or join alliances supporting the cause.
- Launch new initiatives, including through collaboration with customers and other partners, to **support and educate consumers in food waste reduction**, as well as supporting and educating colleagues in our own organisation.



Achievements in 2020

- Worked with customers to turn by-products including from the production of soy milk and coconut water into **high-value ingredients**.
- Extended our packaging portfolio to **offer even more format and size options** to customers for right-sizing.
- Joined the **European Alliance for Green Recovery**, which highlights the central role of resilient food supply chains in building a more sustainable economy across Europe.
- Continued to develop dedicated solutions to **protect our packages from damage during e-commerce**.
- Commissioned **in-depth research** into consumer attitudes to food waste worldwide.
- Launched two best practice lines for cheese producers that delivered **significant reductions in product losses**.

Material aspect

Making food safe and available

Why it matters

If consumption trends continue as projected, the world will need to increase food production by 70% to feed more than 9 billion people adequately in 2050, according to the UN FAO. Yet one third of the food produced for human consumption is lost or wasted globally each year. As a society, we cannot afford to waste food if we are to meet global demand for sufficient safe, healthy and nutritious food into the future. SDG 12.3 aims to halve per capita global food waste at the retail and consumer levels by 2030 and reduce food losses along production and supply chains, including post-harvest losses. Countries and regions including Brazil, the US and the EU are setting targets in line with this overall goal.

As well as improving food security, preventing food loss and waste helps mitigate climate change. Food wastage accounts for around 8% of global GHG emissions each year, or three times as much as the aviation industry¹. Put in the context of national emissions, food wastage would be the world's third largest emitter, after China and the US. Food loss and waste also has a very significant impact on water consumption: the global blue water footprint (i.e., consumption of surface and groundwater reserves) of food wastage is around 250km³ per year.

Food processing and packaging solutions make a significant contribution to food resilience by minimising spoilage of perishable foods, and help to strengthen local food systems, enriching rural communities and boosting livelihoods. Reducing food loss and waste also represents a significant business opportunity for our customers.

1. <http://www.fao.org/3/bb144e/bb144e.pdf>



Our approach

Our solutions are already helping to prevent food loss and waste across the value chain, from the efficiency of our processing and packaging equipment in production, to the right-sizing and functionality of our high-performance packaging at consumption.

Processing

All of our processing equipment is optimised to reduce food loss, and we set ambitious targets for product loss reduction when we are designing new equipment. Our plant design and plant optimisation services also support reductions in food loss and improvements in environmental performance.

Our processing solutions are also helping customers to make use of by-products, helping farmers to gain higher yields from the same amount of raw material and avoiding throwing food away. For example, we designed a process for coconut farmers in South East Asia that maintains the flavour of the coconut water but also transforms other parts of the coconut into high value coconut milk and cream. We also worked with our customer I-Mei in Taiwan to enable them to turn okara – a by-product in the production of soy milk and tofu – into a high value ingredient. See [Spotlight](#) story.

Working with our global network of customers, we are able to integrate smallholder farmers into formal value chains, including through our Dairy Hubs, helping to avoid food losses. By providing access to shared processing and packaging resources, through co-operative arrangements, we can ensure that perishable products that could otherwise be lost gain value, helping boost incomes and improving local food security. For more on this, see the section on [Food availability](#).

Digitalisation and food waste

Digital technologies offer new opportunities to extend the shelf-life of products and reduce food waste. For example, when a QR code is printed on the pallet or individual packages and scanned as the product leaves the factory, it effectively creates a “digital twin” that means the product can be tracked throughout its life. This means we can follow products through the transportation process and, if packages are damaged, identify why this is happening and take steps to solve the issue.

For retailers, the code offers real-time information on stock levels and shelf-life and enables dynamic pricing – where products nearing the end of their shelf-life can be discounted to ensure a quick sale. For consumers, codes allow them to trace the origin of the product they are buying, and verify “use before” and “best within” dates.

Digitalisation and automation within our factories also offers potential for significantly reducing losses during the production process. Read more about our vision of the factory of the future in the section on [Food safety](#).

Packaging

Our high-performance packaging helps to prevent food waste by protecting food and beverages from physical damage, heat, light and potentially harmful bacteria. In the case of our aseptic packaging, it also extends the shelf life of the product, typically to between six and 12 months without preservatives or the need for refrigeration. Aseptic packaging also enables producers to better plan production, again reducing the amount of raw materials wasted.

Right-sized packages can also help to reduce food waste. We offer a wide range of packaging formats and sizes so customers and consumers can select the package that best matches consumption needs. These can help to tackle wasteful patterns of food consumption and deliver safe, nutritious and flavourful food that is resource-efficient to produce and transport.



What we did in 2020

Best practice lines for cheese

We launched two best practice lines for cheese producers that delivered significant reductions in product losses.

The Tetra Pak® Blender VCC, a vertical blender optimised for the production of cottage cheese, reduces product loss of up to 90% compared with conventional horizontal blenders. The **Tetra Pak® Grainy Cheese Vat E4** features a number of innovations, including a new blade design and an optimised vat that enables more efficient cutting, leaving 20% less uncut curd than in previous versions.

Tetra Pak Index

We published the **Tetra Pak Index**, a global study that highlights how food waste is rising up the agenda for consumers, along with other findings. See **Spotlight** story.

Consumer research

We commissioned further in-depth research into consumer attitudes to food waste worldwide, using this to develop a detailed fact base that includes an overview of key trends and highlights opportunities for us to act.

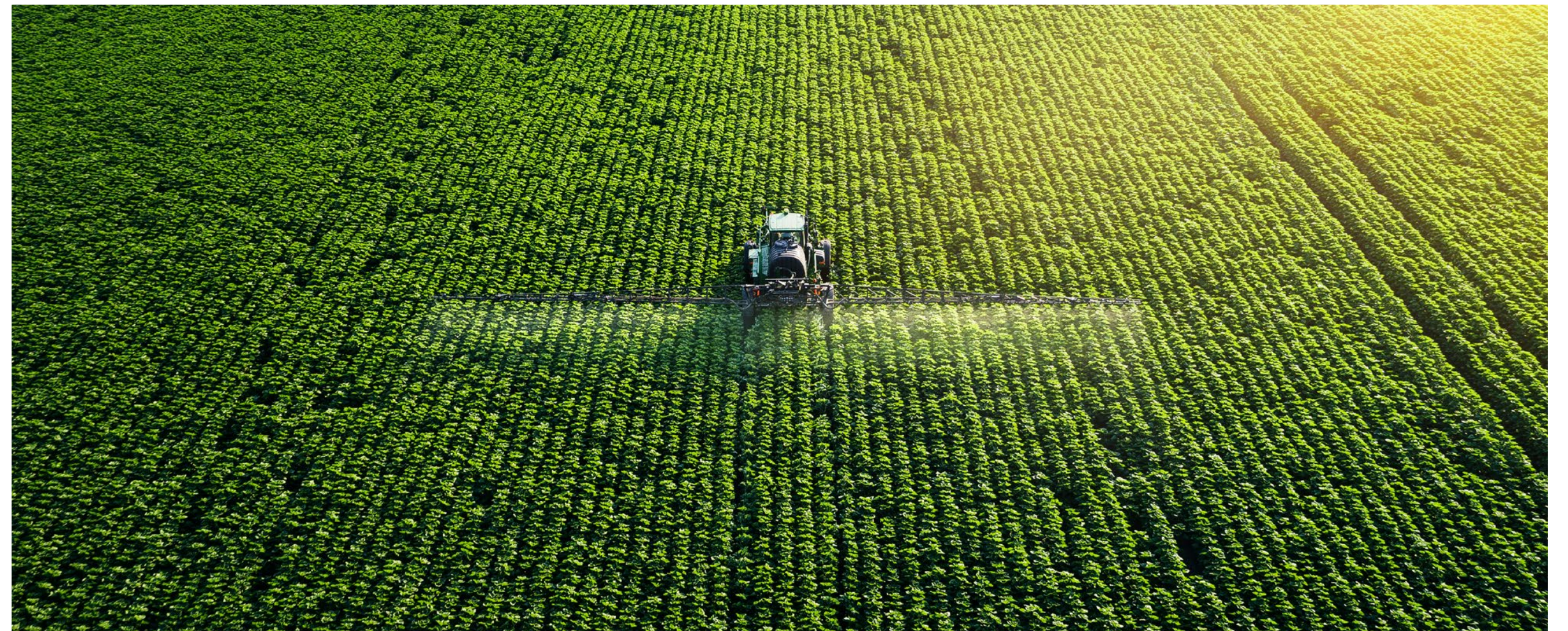
Green recovery

We joined the European Alliance for Green Recovery, which highlights the central role of resilient food supply chains in building a more sustainable economy across Europe.

For more on our work with the Alliance, see our website [➤](#)

Right-sizing and e-commerce solutions

We extended our packaging portfolio to offer even more format and size options to customers for right-sizing. With growth in online retail accelerated by the COVID-19 pandemic, we continued to work to develop dedicated solutions to protect our packages from damage during e-commerce.



Spotlight

Upcycling waste and vegetable surplus to make nutritious food

According to the 2020 Tetra Pak Index, our annual industry report, the impact of COVID-19 on supply chains has accelerated awareness of food waste as a pressing issue.

More than three-quarters of respondents in our global survey now see food waste as a concern – and limiting it is considered one of the top three priorities for manufacturers.

Many of our customers are aware of the importance of this issue and have already set food waste reduction targets.

Here are two examples of how we worked with our customers in 2020 to help them reduce food waste.



Food waste reduction



Matriark Foods, USA

Matriark Foods upcycles vegetable farm surplus and fresh-cut remnants that would otherwise be wasted and sent to landfill – therefore significantly contributing to global warming – into healthy, low-sodium vegetable products for schools, hospitals, food banks and other food service channels.

Matriark Foods worked with River Run Foods, a co-packer that recently began filling Tetra Pak cartons, to develop the recipe, with assistance from our Product Development Centre in Lund. Tetra Pak also provided help with Matriark Foods' package design to clearly communicate the brand's mission, including Tetra Pak and FSC™ logos to support its sustainability position.

The new product was launched in March 2020, and the company aimed to have distributed more than 200,000 cartons by the end of 2020.



I-Mei, Taiwan

Taiwanese food and drink producer I-Mei is working to reduce food waste by turning okara – the insoluble parts that remain after puréed soybeans have been filtered in the production of soy milk and tofu – into a high value ingredient. By upcycling this production waste, I-Mei is addressing a common challenge in the plant-based beverage industry.

Fibre-rich okara forms part of the traditional cuisines of Japan, Korea and China, but had in the past been discarded, creating a significant disposal challenge for industry players including I-Mei.

Tetra Pak worked with them to develop a whole bean processing solution that could capture this unwanted material and incorporate it into their soy milk drinks, creating a premium, high-fibre product with no added sugar, excellent flavour, and a desirable smooth mouthfeel. Packaged in **Tetra Top® Nallo** 330ml and **Tetra Rex®** 1L packages, wholesome soy milk is a new concept about which I-Mei is now educating consumers.

People.



People

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We strive to create a work environment that is safe, inclusive, respectful of difference and fair. And we strive to make a positive social impact along our value chain, supporting communities and conducting every aspect of our business with integrity.

Material aspects

- *Securing a responsible value chain*
- *Promoting OHS and employee wellbeing*
- *Promoting diversity and inclusion*
- *Transparency/active communication in the value chain*

Supporting the UN SDGs



Responsible value chain

Our ambition is to make a positive impact along our value chain, from suppliers to customers, and support the communities where we operate.

We believe that acting responsibly and managing risks is good business practice.



At-a-glance



Commitments

- Uphold the **UN Global Compact's ten principles on human rights, labour standards, the environment and anti-corruption**, extending them across the value chain.
- **Partner with suppliers** to drive down full supply chain environmental footprint and eliminate social risks in our supply chain.
- Promote **commitment to science-based targets** within supply chain and establish joint goals on scope 3 GHG emissions reduction.
- Promote **responsible and ESG/sustainability-certified and verified sources**.
- **Maintain high responsible sourcing standards** with new relevant suppliers screened using social responsibility and environmental criteria.



Achievements in 2020

- Launched formal sustainability initiative, **“Join us in protecting the planet”**, with all base materials suppliers, focusing on a call to action to reduce GHG emissions in our supply chain by 50% by 2030.
- Increased share of suppliers with a **sustainability assessment or ethical audit** that goes beyond our minimum expectations despite the challenging context of COVID-19.
- **Refined risk-based methodology** to identify suppliers in scope for targeted sustainability assessments.
- Initiated an even more **advanced approach to managing sustainability risks and opportunities** in each supplier category.
- **Enhanced our collaboration with key partners** such as EcoVadis, Sedex, SGS and Intertek, including best practice benchmarking.
- Maintained our **focus on training and competence building**, delivering quarterly training sessions for suppliers and providing e-learning modules for employees plus targeted sessions for supplier managers.

Material aspect

Securing a responsible value chain

Why it matters

Tetra Pak is committed to conducting every aspect of its business with integrity, complying with the rule of law and showing due respect to the people along our value chain.

Our company culture is based on strong, shared values, which are continually reinforced amongst our employees and form the foundation upon which we conduct our activities and interact with third parties.

We believe that we have an important role in ensuring that our suppliers act responsibly and sustainably and drive such behaviours in their own supply chains. By sharing best practice, setting ambitious targets and reviewing progress continuously, we can create a movement and truly lead the sustainability transformation.



Our approach

Tetra Pak has an established and well-defined corporate governance framework providing guidance on how we go about our business (see the section on **Our governance framework**). In accordance with our legal obligations, we verify that all parts of our organisation comply with the laws and regulations of the countries in which they operate, behave as good corporate citizens and role models and respect human rights.

All Tetra Pak employees must comply with the Tetra Laval Group Code of Business Conduct, which sets out common rules of business behaviour. This covers working conditions, discrimination, confidentiality, conflicts of interest, financial reporting, obeying the law, bribery and corruption, human rights, child exploitation, and environmental issues.

In addition, Tetra Pak has been a participant in and signatory company to the UN Global Compact since 2004 and is committed to its ten principles on human rights, labour standards, the environment and anti-corruption.

We extend these commitments across the value chain by focusing on responsible sourcing and working with suppliers on common sustainability initiatives. To increase overall maturity in the supply chain, we undertake supplier training and development activities on various compliance and sustainability topics.

Responsible sourcing

Responsible sourcing is one of the strategic objectives for Tetra Pak, reflected in our Procurement Policy and Responsible Sourcing Procedure. The requirements apply to all purchasing categories, and compliance is monitored as part of our governance, risk and compliance framework.

Supplier Code

Our Code of Business Conduct for Suppliers (Supplier Code) is an integral part of our supplier onboarding process and purchasing agreements, setting mandatory requirements for all our suppliers and their sub-suppliers. In addition, we encourage and work with suppliers to help them go beyond the mandatory requirements and strive for continuous improvement. The Supplier Code defines our requirements in the areas of human rights, labour practices, occupational health and safety, environmental management and business integrity. More stringent and specific requirements are in place for our base materials suppliers.

Supplier evaluations

As part of our efforts to secure a responsible and sustainable supplier base, we perform regular supplier evaluations with the support of our partners and third-party service providers.

Supplier selection for both desk-based evaluations and on-site audits is based on materiality criteria, country and industry sustainability indicators as well as supplier criticality for Tetra Pak. If suppliers do not meet our expectations, we work with them on corrective actions or conduct additional on-site assessments to gain better visibility on potential gaps and improvement areas.

Audit process

Tetra Pak conducts periodic ethical audits of suppliers, using the Sedex Members Ethical Trade Audit (SMETA) methodology. Suppliers are selected due to their strategic importance, results from desk-based evaluations, or other concerns. The audits are pre-announced and performed by independent third parties.

In some cases, we use alternative standards and approaches based on the type of purchased goods and services, such as the Responsible Business Alliance auditing standard for the IT industry.

In case of non-conformities or weaknesses identified during evaluations or on-site audits, Tetra Pak expects suppliers to share a clear and comprehensive Corrective Action Plan showing how issues will be addressed. These plans should outline sustainable and continuous improvement, not “quick fixes”. Supply chain operations are complex and challenging, and additional time may be needed to address deep-rooted issues.

Training and awareness

We continuously enhance our training programmes and e-learning to enable all people involved in procurement to effectively integrate responsible sourcing and sustainability considerations.

For more on our approach to responsible sourcing of base materials, including auditing of our base materials suppliers, see the section on **Biodiversity and forests**.



What we did in 2020

Our structured approach to supplier evaluations helped us prioritise our efforts and maintain the focus on critical suppliers in the challenging context of COVID-19.

By the end of 2020, we had significantly increased the percentage of suppliers in scope with a valid desk-based assessment with acceptable risk and no open overdue non-conformities from ethical audits. This covers the great majority of spend with approved suppliers within the selected scope.

We started to apply the riskmethods supplier risk-management solution, introduced in 2019, to responsible sourcing across all spend categories (see Spotlight story). Essentially a platform that allows us to consolidate scores from EcoVadis and other partners on different types of risks, this solution helps to give us a 360-degree view on all our suppliers, further improving the way we identify, assess and mitigate risk.

We strengthened our relationship with EcoVadis, using their evaluations as a tool to drive continuous improvements with our suppliers. We clarified our expectations with our suppliers, including how we work with them to improve their evaluation scores when necessary. We also reviewed the qualification process for new suppliers and ensured that all are onboarded in a formal manner, including sharing our requirements around responsible business.

Supplier sustainability initiative

We launched a new sustainability initiative called “Join us in protecting the planet”, inviting our suppliers to join us as partners in our common sustainability journey, laying out 20 actions for 2030 across climate (including working towards our target of reducing GHG emissions by 50% by 2030), biodiversity and circularity. We launched the initiative with a webcast, in which more than 160 participants from suppliers around the world took part, including CEOs and sustainability leaders. The response was overwhelmingly positive, and most suppliers said they want to contribute to the initiative.

Virtual supplier assessments

We started investigating the Sedex Virtual Assessment, which provides a practical alternative where physical SMETA audits cannot take place. Following a thorough planning stage, auditors lead a virtual site tour through the use of video technology, as well as an examination of a supplier’s management systems and documentation. Subject to successful roll-out in 2021, this will form part of the assessment approach that we use in our assurance system going forward.



Training and competence-building

In 2020 we continued rolling out training and competence building sessions. During each quarter, we organised dedicated sessions for suppliers with support from our partner EcoVadis. Besides a general review of sustainability topics and the evaluation approach using the EcoVadis platform, we focused on the definition and implementation of targeted action plans to improve supplier sustainability performance. We also maintained focus on our e-learning modules for existing and newly onboarded employees. Targeted sessions were conducted with supplier managers to enable a better dialogue with suppliers and enhance their ability to act as sustainability ambassadors. In parallel with this work, we completed a significant transformation in the way we work within procurement. We now have a more category-focused organisation, which will further support our work around responsible sourcing and our sustainability strategies. For more, see the section on [Biodiversity and forests](#).



Spotlight

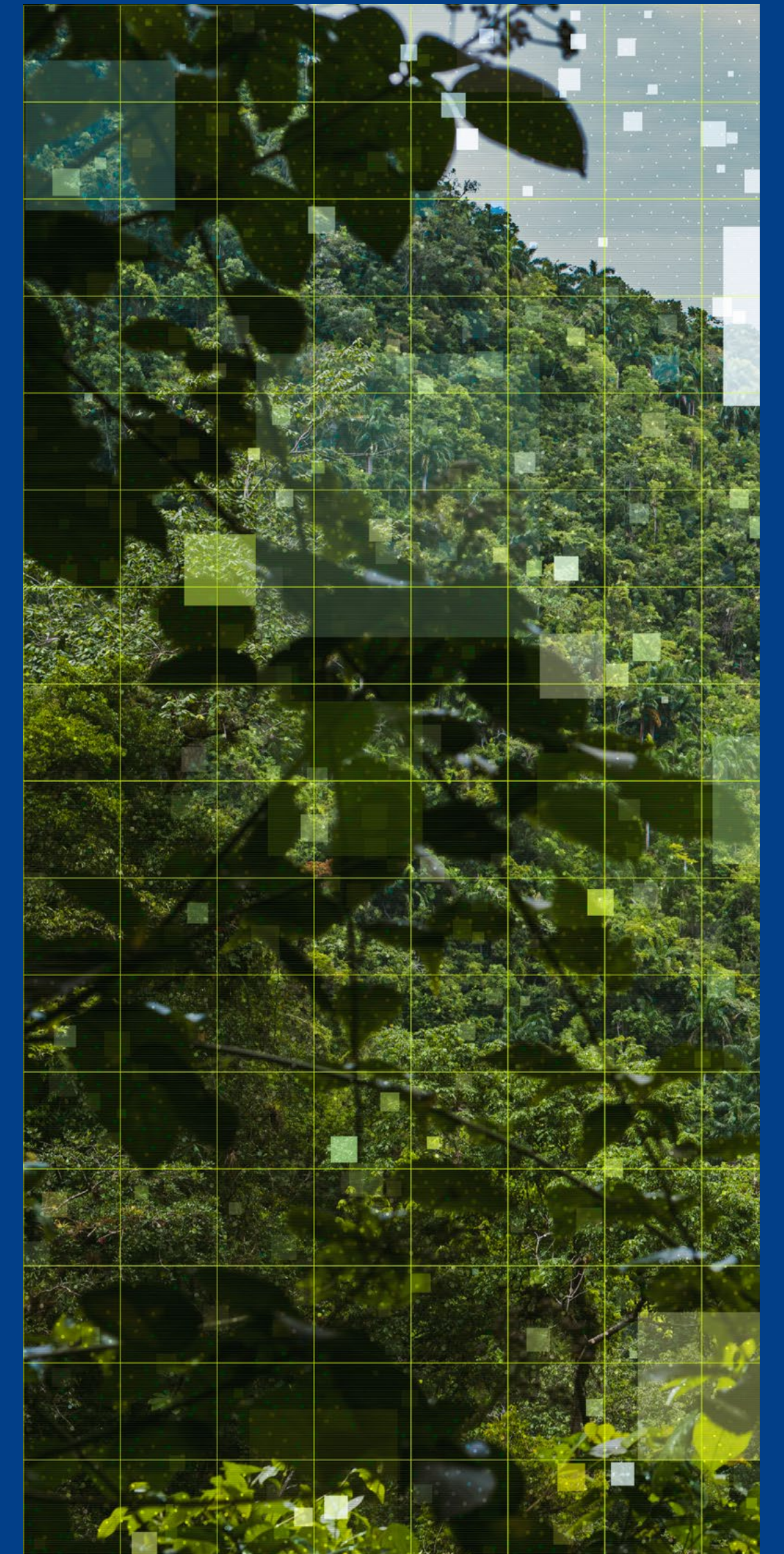
New solution delivers AI-enabled monitoring of supplier risks

In 2020, Tetra Pak Supplier Management introduced a new software solution, riskmethods, with the aim of increasing the efficiency of our supplier risk management. The solution allows us to visualise and track risks for all selected suppliers on one single platform easily accessible to all supplier managers. The tool is highly configurable and we have been able to tailor the set-up to reflect Tetra Pak governance structure around supplier management.

In addition to using AI to monitor millions of news stories in real time, the riskmethods platform also consolidates and integrates data from internal and external sources such as EcoVadis, Creditsafe and RapidRatings. riskmethods analyses and validates the data to verify legitimacy and link to the suppliers monitored by Tetra Pak (based on supplier name and geo-location).

Increased risks, related news or other relevant information will trigger alerts and early warnings to Supplier Management allowing for timely actions or follow-up with suppliers. In addition to alerts related to e.g., financial risk, natural hazards or cyber security, riskmethods picks up on alerts in several areas linked to sustainability as well as regulatory and legal compliance. For example, any instances of identified non-compliance with labour practices and human rights, waste of natural resources or pollution of the environment or usage of hazardous substances in production process are identified and relayed as alerts to the supplier manager responsible for the respective supplier. Similarly, the AI module picks up on occurrences of fines and penalties relating to corruption, bribery, price-fixing or FDA warning letters, and triggers alerts accordingly.

The system alerts provide supplier managers with early warning signals and allows for more dynamic and proactive risk management. In addition to reacting promptly to any high-risk alerts, best practice is to review supplier-related alerts and risk indicators regularly and include as standing agenda point in our supplier reviews.



OHS and wellbeing

Our ambition is that all individuals are free from harm during every project and activity. We believe that working as a team is the best way to achieve our goal of zero accidents and work-related illnesses, and we take a holistic, centralised approach to supporting the health and wellbeing of all our employees.

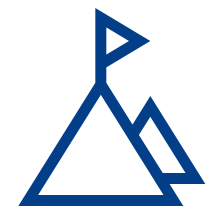


At-a-glance



Commitments

- Continue to **drive efforts towards our ultimate goals of zero accidents and work-related ill-health.**
- Maintain a **CEO-driven safety culture** that is pervasive across the company, and constantly reinforced.
- Earn recognition by employees that **our company is among the best to work for.**
- Continue to deliver **formal health and wellness programmes** to employees and beyond.



Achievements in 2020

Dealing with COVID-19, which started to affect us in early 2020, meant that most of our planned initiatives for the year were temporarily set aside to allow the full OHS effort to focus on keeping our people safe and our business running during the pandemic. Our pandemic response included:

- Setting up a COVID response team led by our CEO and supported by OHS and pulling in **expertise from across the business to analyse the situation** as it unfolded, develop policies in response and supply regularly updated news, advice and information on all aspects of the pandemic for all employees.
- **Introducing a 24/7 global COVID-19 helpline** in conjunction with International SOS. Staffed by professional counsellors, the aim was to provide rapid access to mental health support for employees and their families.
- Developing and continually updating **clear and consistent procedures** to ensure the safety of employees and contractors whose jobs required them to work on site or to travel.

- **Providing information, equipment and support** to employees working from home.
- **Sourcing and providing personal protective equipment (PPE)** and working with our facility management partners to deliver increased levels of hygiene cleaning and other protection, such as temperature monitoring for everyone entering our sites.

Material aspect

Promoting OHS and wellbeing



Beyond COVID-19

The following additional activities continued alongside the pandemic response:

- We launched a corporate OHS procedure for the management of contractors, which ensures a globally uniform approach to the way we select, validate and monitor the activities of third-party contractors working for Tetra Pak, whether at our own sites or those of our customers.
- We continued the implementation of a machinery safety programme for our supply chain operations to standardise the way we risk-assess the safety of existing machinery guarding and, where indicated, take steps to increase the level of protection.
- We continued to roll out our wellbeing programme across the global organisation.

Why it matters

Our most valuable resource is our people. Without the health, safety and wellbeing of our employees, our business is unable to function. It really is that simple.

Our company promise to “protect what’s good” means protecting our people and keeping them safe and promote their health every day and everywhere they work. Occupational health and safety (OHS) does not only apply to factories; it affects all of our people. OHS is critical to our business strategy and our approach is underpinned by our core values.



Our approach

The nature of our operational work and the equipment our people work with brings with it safety risks, including machinery safety, working at height, forklift trucks, cutting and welding, driving, heavy lifting and manual handling. We are working hard to build the kind of safety culture that continually reduces and effectively manages these risks.

Our ultimate goal is zero accidents and work-related ill health. To that end, we continue to drive our global OHS Culture Change Programme. In recent years we have been working to reinforce a “fair and just” culture, where it is safe to report and learn from mistakes, errors and system flaws, but where violations of safety rules are not tolerated. We have also launched a set of nine “life-saving rules” developed from the major hazards that employees in our manufacturing, services and project organisations are likely to be exposed to.

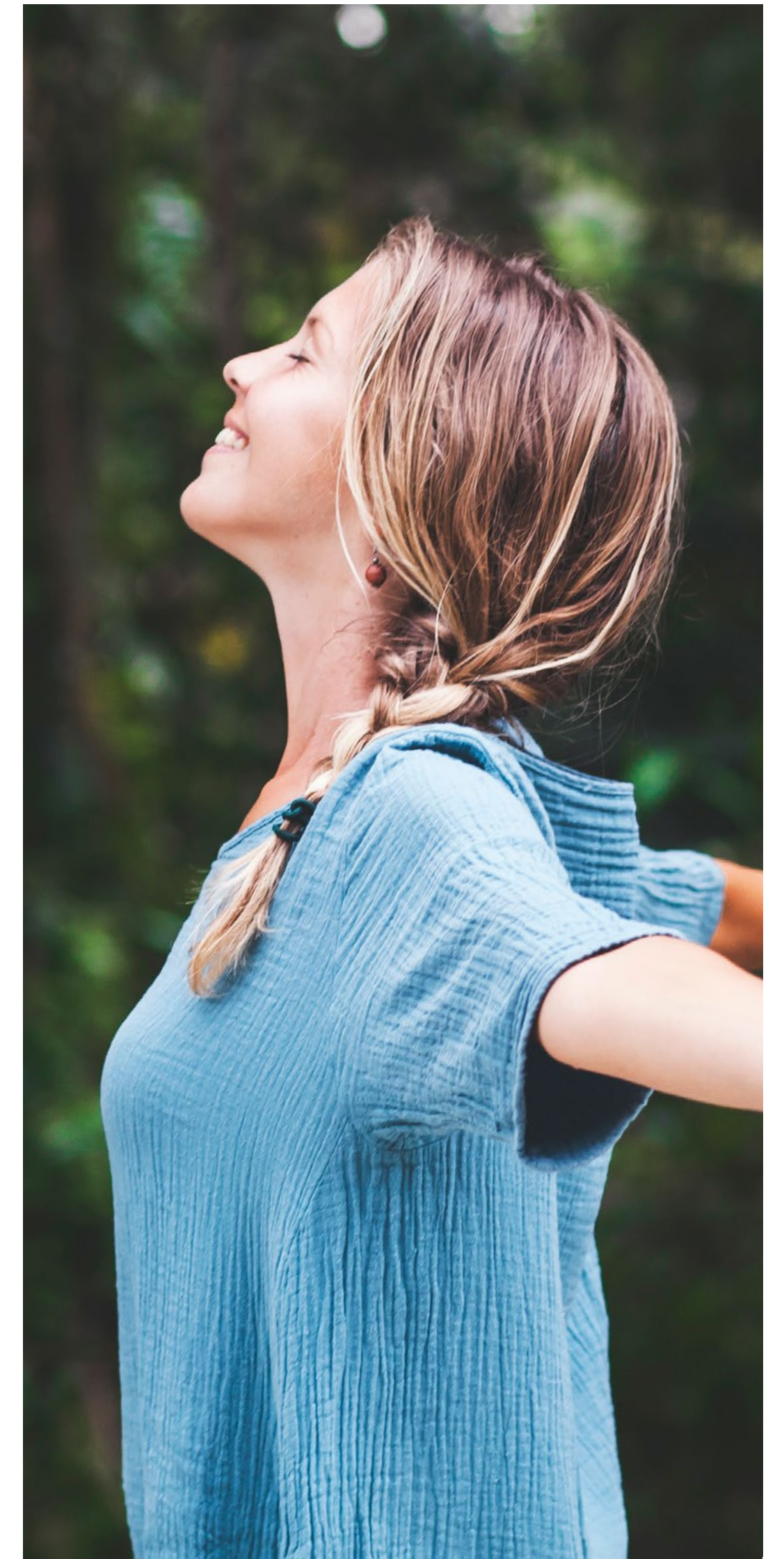
We monitor how we manage OHS through a series of assessments. Our corporate governance function lead a top-level annual self-assessment of compliance with our global OHS policy. Our manufacturing sites are externally audited to OHSAS 18001 and ISO 45001. To ensure compliance with our own procedures we have a global programme of audits of our market companies, although in 2020 these were paused due to the pandemic.

We have a strong network of regional and local OHS officers led by a Corporate OHS team to ensure that all companies within our business have access to competent OHS support.

Our manual on OHS at customer sites provides a set of mandatory procedures applicable to all Tetra Pak employees working at customer premises. The manual helps teams report against 19 OHS standards such as working at height. We monitor performance using a maturity matrix based on five levels of compliance. Deviations from the required standards result in clear action plans to drive improvement. The manual is supported by a shorter handbook for all employees that provides simple health and safety guidance. The handbook is also available as an app.

We have a holistic and centralised approach to health and wellbeing. We use central governance and run a rolling programme of initiatives to drive progress, including a global mental wellbeing programme.

In addition to ensuring full compliance with legally required medical examinations for high-risk groups, many of our market companies also focus on employee health and wellbeing more broadly, from offering regular hearing and eyesight tests, routine vaccinations and ergonomic risk assessments; to stress management programmes, complementary therapies, advice on nutrition and healthy living, and alcohol and drug support.



What we did in 2020

In 2020, the COVID-19 pandemic tested each of us – and the business as whole – in ways we could not have imagined two years ago. In many ways, OHS became the most important and visible arm of Tetra Pak as we strove to protect our employees in every part of the world.

By the end of January 2020, Tetra Pak had a crisis team in place in response to the initial outbreak. At that point all that was clear was that this virus had the potential to become very serious very quickly. It posed a risk to the food supply chain, to livelihoods, to our people and to our ability to conduct our business.

When the virus became a pandemic in March, we set up a steering group chaired by our CEO with OHS as the research engine and main driver, focusing on people, travel, health and communication. It was clear from the outset that our priorities must be:

- To protect people: By keeping people safe, both our own employees and those of our customers and other stakeholders.
- To protect food: By ensuring we help our customers maintain food supply for communities worldwide.

Research and risk

Some countries under-reported infection rates or took inadequate safety measures (e.g., late lockdowns, no rules on mask-wearing), taking a view that the needs of the economy were of the highest priority. Consequently, we conducted our own analyses, using data from world-renowned sources such as the Johns Hopkins University, WHO and Our World In Data.

Data modelling early on alerted us to the potential scale of the problem – and to what an “exponential increase” in cases would actually look like. Based on our weekly analysis of case rates and testing, we categorised countries into Low, Medium and High risk (which was continually updated as the pandemic developed) and used this as the starting point for developing country-specific working policies and travel guidance.

While some companies announced a complete suspension of travel during the pandemic, we took a more pragmatic approach, recognising the need to support our customers. International travel was dramatically reduced, with decisions being made on a case-by-case basis. Our position was – and remains – that if it could be done virtually, then it should be. For travel deemed “business essential” or “business critical”, strict policies were put in place to ensure the safety of our people, including, where necessary, paid hotel quarantine to protect families on their return.

As more data became available, we acted on alerts from International SOS related to medical risks in a country. We will not allow business travel to any country where intensive care units are at 80% capacity or over, as this represents too high a risk for the traveller. We created a Travel Matrix explaining our own company travel restrictions and provided guidance on the general travel environment and restrictions (both Tetra Pak and national government) in place for each location.

Communication

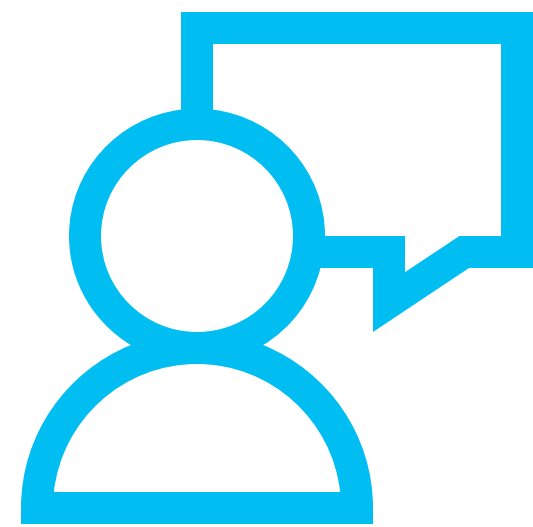
Our aim was to provide a service of continuous outreach for all employees and to keep everyone informed and up to date via two consistent sources of information: the Global COVID-19 Update and Q&As. The Global COVID-19 Update came out at least once and usually twice a week and functioned almost as a rolling news service. It covered the global situation, linked to trusted external sources of information and communicated our latest policies and guidance. It also included a forum where employees could ask questions, each of which was answered by the team.

The Update was circulated very widely via all market company managing directors and OHS officers around the world. This was complemented by the Q&As, which answered the most commonly asked questions on all aspects of the pandemic and related policies. This too was updated weekly as the situation evolved.

Employee support

We offered a substantial package of employee support during the pandemic and strove to be fair and consistent in this globally, matching support to need as the situation changed for different regions. This included financial support in the form of:

- A supplementary travel allowance.
- Reimbursement for quarantine stays in a hotel for employees returning from business-critical trips who have “at risk” dependents living with them.
- A grant to cover the cost of day care for children at home.
- A financial package to allow those working from home to purchase an office chair, laptop riser and remote keyboard (some employees were able to take these items from their offices on a loan basis instead).



24/7 employee support

Site controls

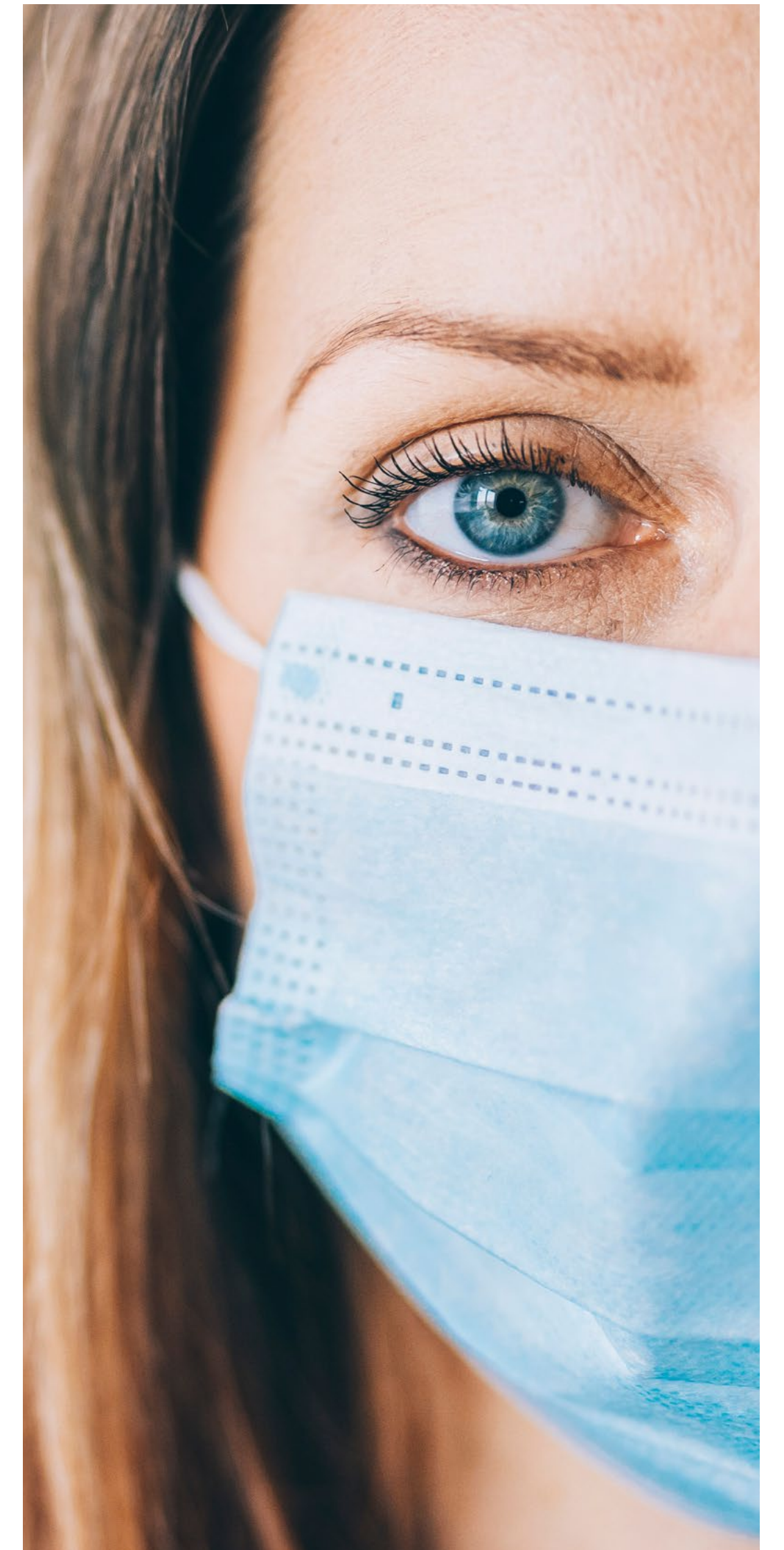
We implemented strict controls for all our sites and documented these in a global procedure. We also developed guidance for visiting customer sites. Factories were kept running with micro teams wherever possible to reduce contact between groups of workers and through Facilities and Real Estate Management (FREM) we were able to manage our sites globally, collaborating with partners Sodexo and CBRE to increase hygiene standards and implement temperature checks, social distancing (the two-metre rule) and the wearing of masks.

As infection rates dropped in many places over the summer of 2020, some sites were opened up as employees returned to work. Our Phase 2 measures, including protective screens and signage, ensured a COVID-19 safe environment.

Infection rates

The trend of COVID-19 cases in Tetra Pak correlates closely to what we see in the general population. Due to our strong pandemic control, our data shows that no one function was at increased risk of catching the virus. In fact, service engineers (ostensibly at higher risk at work because they visit customer sites), reported a slightly lower rate of infection than average (they make up 23% of employee base and had 21% of overall employee cases of COVID-19), indicating that our workplace infection-prevention measures were highly effective.

For more on how we adapted ways of working and protected employees, read the interview with Phil Read, Senior Vice President of Human Resources on our website [➔](#)

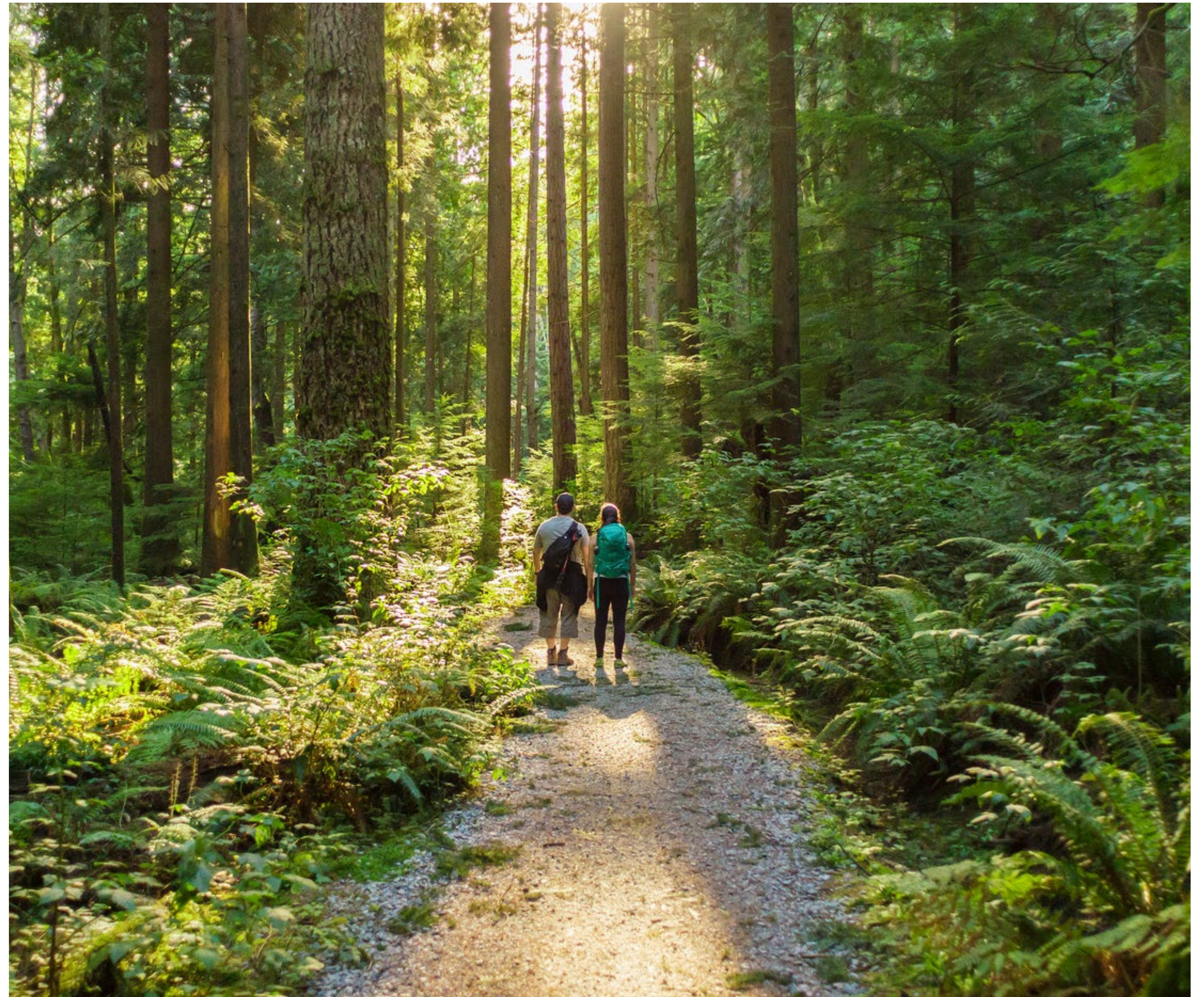


Next steps

The pandemic is not yet over. In fact, as of spring 2021, the world is experiencing the highest number of COVID-19 cases ever recorded. OHS will continue to be at the forefront of Tetra Pak's response and the extra support and procedures we have already put in place will continue for as long as they are needed.

As well as continuously monitoring the situation and adapting our response at local level as required, our research into vaccination continues. We have provided employees with information about vaccines throughout the pandemic, but we now need to understand the implications, for the business and individuals, of a post-vaccine world, for example the legal implications for privacy and data storage around the potential introduction of "COVID passports".

We will also continue our focus on supporting employees' mental wellbeing. Our mental wellbeing programme launches throughout 2021 and includes interactive e-learning for all managers and an Employee Assistance Programme offering free, confidential support 24/7 for employees and their families.



Spotlight

Emergency response

Robert Ingvarsson, Supplier Manager Corporate Services, explains how colleagues across Tetra Pak worked together to secure adequate supplies of face masks during the COVID-19 pandemic – ensuring that no time was lost across our 140 sites worldwide.

“The first indication that life was about to change came on 29 January 2020, when we received an email from Tetra Pak China asking the global supplier management team to help source face masks. China is the world’s main manufacturer of face masks, so if they needed to source them externally, it was a sign that something dramatic was happening.



Millions of face masks distributed

We were aware that there had been a disease outbreak in Wuhan, but while China was already living with the reality of COVID-19, the rest of us had yet to understand what that might mean.

“By March, things were happening fast. All of Tetra Pak’s sites needed face masks – but we were trying to procure them in an environment in which every business and government around the world was now a customer. At that point it was a completely unregulated market, with demand far outstripping supply.

“Our face mask operation was a collaboration between Supplier Management (procuring and delivering face masks according to need), OHS (calculating demand/consumption) and Facility & Real State Management (FREM) (managing supply and use on site).

“Everything was happening at speed, but amid the initial chaos we needed information. What kind of face masks did we need, and how many? For every site, OHS had to calculate the number of employees and how frequently they would need to change their masks. OHS came up with consumption figures and specification, and that’s what we worked to fulfil. Before the crisis, face masks had been a tiny item in our inventory, just a sub-category of general PPE, but suddenly they were the centrepiece on which the entire business was reliant. We had to learn really fast.

“Especially at the beginning, it was a cut-throat environment and we needed to act decisively. At Tetra Pak it’s in our DNA to be careful about spend and to focus on quality. These are enduring values, but in this instance we had to emphasise our one overriding aim, which was to protect our people. We could not afford to hesitate because it was absolutely vital to the business that we secure a supply of face masks.

“In terms of logistics, we were dealing with local, regional and global supply, and every Tetra Pak site was in scope as a delivery point. A complex supply chain developed in a short time frame. We needed to assess consumption rates (were they higher or lower than predicted?) and keep local stores replenished.

“You’d expect something like this to entail advanced warehousing and supply chain tools but it simply wasn’t an option to put them in place – everything grew too fast for us to develop and learn new systems.

“Instead, we managed with spreadsheets, phone calls and email. It worked because everyone was so dedicated and because we all understood exactly what we needed to do – secure a supply of face masks to keep our people safe, keep our business running and honour our commitments to customers. In all, we managed to purchase and distribute millions of face masks to 140 Tetra Pak sites globally, and at no point was time lost because of an inadequate supply.”

Diversity and inclusion

Our ambition is to maintain a truly diverse workforce, where every employee is respected, included, engaged and fully contributing.

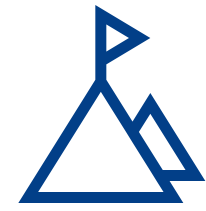


At-a-glance



Commitments

- Continue to work towards the “desired state” where **all our people can thrive** and we see and value diversity.
- **Ensure all voices in the company are heard** through our enlarged global diversity advisory panel and new regional panels.
- Work to **increase female representation in management roles** and ensure that the gender balance within our organisation reflects the places where we do business and work.
- Sustain investment in **Future Talent Programmes**.
- Enable **world-class training and development** for all our employees.



Achievements in 2020

- We developed and implemented a **new policy aimed at preventing discrimination, harassment and bullying**, along with training and an internal campaign, Speak Up!
- We expanded our global diversity advisory panel and established a similar panel within each of our four regional clusters, **increasing the number of colleagues involved to 65 from 15 in 2019**.
- We launched an entirely new leadership curriculum and doubled the number of participants in our **Inclusive Leadership training**.
- We moved almost all our learning and development online and set a clear expectation that **all colleagues spend at least two hours each week on learning and development**.
- We received **“Great Place to Work” certification** after pilot applications in four countries (achieving “Top Company” status in two of these).

Material aspect

Promoting diversity and inclusion

Why it matters

Our biggest asset is our people. As part of our wider commitment to the UN Global Compact we constantly strive to create a work environment that is inclusive, respectful of difference – whether in terms of gender, race, ethnicity, sexual orientation, disability or any other factor – and fair. Everyone's voice deserves to be heard and development opportunities should be offered to all. These are fundamental values.

Tetra Pak is already a diverse company. Operating across 160 countries worldwide, our workforce embraces many different nationalities, ethnicities and cultures. We believe that becoming an even more modern and attractive employer is key to attracting and retaining the talent we need to achieve our Strategy 2030 ambitions.



Our approach

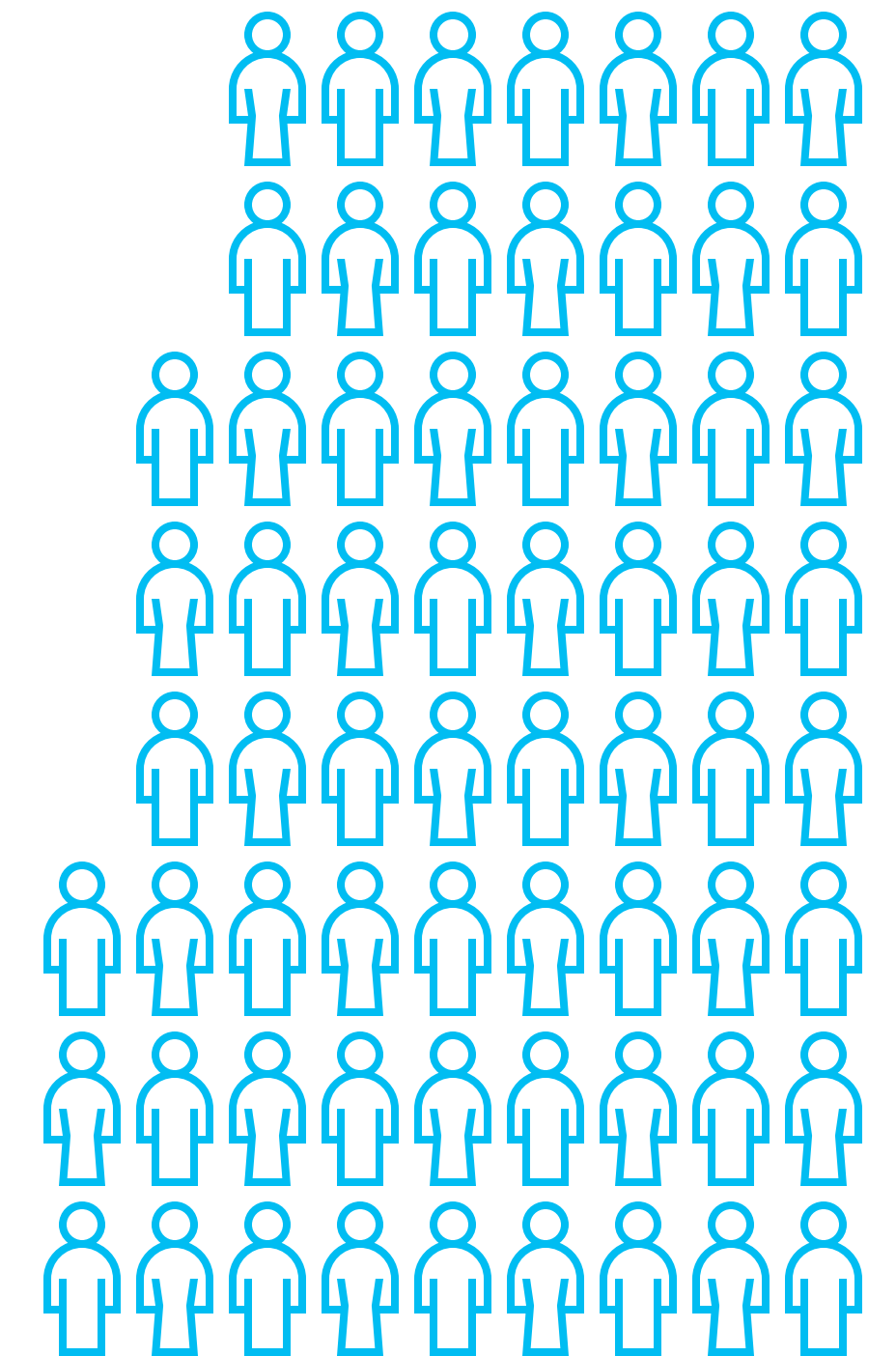
Our diversity and inclusion (D&I) strategy is guided by our D&I Panel, a representative group made up of 65 colleagues from across Tetra Pak. We believe that embracing D&I benefits our people, by creating a respectful and inclusive working environment where all colleagues are engaged and able to contribute, difference is respected and all talent is able to develop and grow. We also believe it delivers the following benefits for the business:

- A competitive advantage: Strengthening our customer value proposition by offering a diverse team with perspectives that match the evolving needs of our customers and consumers
- A talent advantage: Maximising our performance by widening our access to talent, creating an environment where everyone is engaged and performs at their best
- A decision-making advantage: Leveraging the power of diverse perspectives and experiences to unlock creativity and performance; challenging ourselves to think and act differently.

With this business case in mind, we have created a “desired future state”, which describes a respectful and inclusive work environment, company-wide engagement and dialogue around diversity and its value, and an organisation whose diversity reflects our business and consumers.

This is a journey to which we are committed over the long term and on which we consistently monitor our progress. We are working to ensure we continue to bring about positive advancements in culture that enrich us as an organisation and as individuals. We measure our progress on this journey through key metrics including gender representation at all levels of our organisation and ratios for external hiring and promotions, which are regularly collated and recorded on our Diversity Dashboard and Inclusion Index. These tools allow us to highlight progress and identify and address areas requiring more focus.

A vital element of inclusion is offering career development opportunities for all. Re-skilling and up-skilling have never been more important to the sustainability of the business. They are also vital in ensuring that individuals are empowered to enjoy sustainable careers. As such, learning and development is an area of continuous focus in line with our 2030 Strategy.



65

D&I Panel members

What we did in 2020

D&I

Using our 2019 year-end data, and in particular taking our 2019 Inclusion Index as a baseline, we set our main focus in 2020 on further enhancing a work environment that is respectful and inclusive. We called our actions around this the Speak Up! initiative.

The Speak Up! Initiative involved developing a specific global policy, the Workplace Conduct Policy, on discrimination, harassment and bullying issues where previously this was a paragraph in our Code of Conduct. This allowed us to put a stake in the ground and be clear and specific about what creates a positive environment and which behaviours are unacceptable.

We have invested in this area by up-skilling HR teams across the organisation around how to intervene and manage complaints, in addition to our formal whistle-blowing platform. We launched new training around these issues (mandatory for leaders and recommended for all employees). At present 50% of our people leaders have completed the training and 100% should have done so by the end of June 2021.

We also developed and launched a global awareness campaign where our own employees spoke about unacceptable behaviours – from micro-aggression to outright discrimination. The feedback on the campaign was good and we have seen an increase in people starting to raise such issues with the HR team, which we consider to be a positive outcome.

[To read the full Speak Up! case study go to our website](#) >

New D&I panels

We increased the voice of diverse groups by expanding membership of our global D&I Panel and also broadening the range of differences represented on the panel. In addition, we established cluster-level panels to address issues at a more local level and to embed accountability deeper within the organisation. There are now 65 people working on this, up from 15 in 2019. They are providing input on barriers and challenges faced by employees and these will be developed into action recommendations for leadership teams.

[To read the full case study on our new D&I panels, go to our website](#) >

Inclusion Index deep dive

We also wanted to investigate the correlation between inclusivity and engagement and retention. To that end, we commissioned a deep dive analysis of the results of our 2019 Inclusion Index. This showed beyond doubt that increased inclusivity leads to better overall employee engagement and retention. When we shared the results of our Inclusion Index deep dive across the business, we saw an immediate increase in demand for Inclusive Leadership training. In fact, we doubled the numbers of participants compared with 2019.



“Buddy” scheme

Finally, we integrated a D&I approach into the onboarding process, by introducing a “buddy” scheme. With the number of female hires into technical positions increasing, we want to ensure that all new employees are getting the support they need. In future the scope of the scheme will be broadened to include all new employees.

Learning and development

New leadership curriculum

As part of a long-term plan to foster new approaches to leadership and generate cultural change across the business, we launched an entirely new leadership curriculum in 2020. In order for everyone to understand what this change means in their own work context, our ongoing goal is to deliver it to everyone within Tetra Pak by the end of 2021.

The COVID-19 pandemic meant that the whole programme had to be delivered virtually (previously only 2% of classroom training was delivered online). We managed to do this and stay on track with the rollout. Progress has been extremely good: all Global Leadership Team direct reports received training in 2020 along with 50% of leaders the next level down and a third tier of training had started by the end of 2020. The aim is to deliver this training to every employee and we are on track to achieve this on schedule in 2021.

We also managed to repurpose the vast majority of our other training, including some technical training for service engineers, so it could be delivered online.

Fortunately, we already had a good technical foundation in place as part of our work in 2019 to ensure equal and inclusive access to learning. We were able to build on this and launch a Learner Experience Platform to facilitate delivery.

To read the full case study on remote learning, go to our website [➤](#)

Future Talent Programme

The Future Talent Programme continued to run throughout the COVID-19 pandemic. In 2020 we hired 139 graduates on the scheme and training has continued despite all the participants having to return home from their placements. Current restrictions mean the new cohort is reduced from previous years (with around 100 graduates to be hired in 2021) but we plan to return to pre-pandemic numbers as soon as this is feasible.



139 graduates hired



External recognition

A Great Place to Work

We received “Great Place to Work” certification after pilot applications in four countries (achieving “Top Company” status in two of these). This means that all four benchmark positively against other companies in their respective countries and that two are in the top quartile. The application process includes a detailed employee survey, designed to identify whether employees feel trusted and valued in the workplace.

Next steps

D&I

Driving the D&I agenda

We will feed the insights of our enlarged global diversity advisory panel and the new cluster panels into our longer-term plan to ensure the agenda is driven by as diverse a group of people as possible.

New diversity initiatives

Our work on gender equality is ongoing and we plan to broaden our range of diversity initiatives to include other groups of employees, starting with people with disabilities.

Focus on female representation

Due to reduced levels of hiring and fewer moves and job changes during the pandemic, we found that progress on our Diversity Dashboard, while still showing improvement overall, was slowing in some areas. As a result, we have identified areas of renewed focus including working to increase female representation, for example through our Future Talent Programme, and providing targeted support for female employees across the organisation including through mentoring and leadership acceleration programmes.

Learning and development

Upskilling and re-skilling are increasing vital for individuals and for the business as a whole. We plan an increasing focus on learning for all employees through a range of activities, including allocating two hours per week for learning and development for all employees. Having spent 2020 making learning possible in a new working environment and delivering training related to new leadership behaviours, 2021 will be about using newly acquired skills and delivery platforms to ramp up learning and increase career development opportunities for all.



Spotlight

D&I: a broader perspective

As part of our efforts to ensure our D&I agenda is driven by as wide a group as possible, in 2020 we set up D&I panels in each of our four clusters. Working alongside our existing global panel, the new cluster groups will focus on identifying and tackling issues at local level, and working with cluster management teams to help shape our overall D&I roadmap.

We spoke to cluster leaders in GMEA and the Americas about what the new D&I panels mean for them.



Tackling issues at a local level

Maira Ahmed, HR Cluster Leader, GMEA:

“GMEA is a huge and culturally complex cluster stretching from Iran and Pakistan all the way to Africa. We already had two members on the global D&I panel but, with over 50 nationalities and 18 languages, that wasn’t really enough to represent the diversity we have. The cluster panel has nine members, including eight women and one man from a group that has often felt excluded from the Tetra Pak mainstream in our cluster – service engineers. When we talk about inclusion, we mean everything: nationality, religion, age, level of education, sexual orientation, and so on, but gender is particularly important in GMEA, as women currently represent only 18% of the workforce.

“The success of the panel will depend on an important aspect, which is closing the loop: not only do we discuss issues at panel meetings and then disseminate them more widely in the workplace, but we also go out into the workplace and listen, so we can bring people’s concerns back to our panel meetings and discuss them, always looking for a way forward.

“In terms of priorities, we have set only one goal for 2021, and that’s to find the right words, to use our voice and to make sure people feel heard. It’s not a tangible thing, but if we can start the conversation and get D&I properly on to the agenda in GMEA we will have moved the needle in the right direction. We are all very aware that it will be a long slow process of change, given the cultures that are dominant in our cluster. In a sense, we are preparing the ground for future change. We are also – and this is incredibly important, perhaps even life-changing, for our panel members – creating a safe listening space. The value of this and the impact we all feel from being truly seen and heard is profound.”

Juan Cubillas, HR Business Partner Americas, and **Luciana Mendes**, HR Cluster Leader Americas:

“The response to our call for volunteers to join the Cluster Americas D&I panel was extremely positive. Over 100 people expressed an interest and from these we have selected 21 employees, covering as diverse a range of nationalities, ages, genders, races, sexual orientations, business groups and so on as possible. Many of those who we did not select have expressed an interest in volunteering for any future D&I projects, so we know there is a keen and committed interest in this area.

“One of the challenges of this cluster is the range of countries with very different levels of maturity around D&I. Whereas in some countries the concept is fairly mature, there are others in the cluster where it is still at an initial phase and not so broadly developed or understood.

“Having a cluster-level panel as well as representation on the global panel means we will be able to continue developing the concept of D&I in our cluster in a way that feels natural rather than imposed. We see our role as making D&I relevant in the Americas in response to the culture change being driven by senior leadership, with the aim of becoming a more diverse and inclusive cluster.

“As we start to explore the challenges and opportunities we face, it is impressive to see the level of engagement we have in the panel. Hearing their personal stories and learning how and why they had chosen to volunteer was powerful and reinforced for us the importance of the task ahead.”

Transparency and active communication

We are committed to transparency and openness across our value chain, actively communicating about our sustainability activities, reporting on both our achievements and our challenges, and providing information about our products, including sourcing, food protection and safety, environmental performance and recycling guidance.



At-a-glance



Commitments

- Maintain public **high-quality disclosure of environmental information** through CDP.
- Continue to earn **high recognition and trust from communities globally** that are impacted by the company's activities.
- Continue to **work with governments worldwide** on policy issues related to sustainability, food packaging and healthy diets.
- Continue to equip our employees to be **sustainability ambassadors**.



Achievements in 2020

- Only company in the carton packaging sector to be included in **CDP's leadership band for environmental transparency and action** for five years in a row and to score an outstanding double "A" for climate and forests in 2020.
- Rated in the top **1% of companies** in our industry category by EcoVadis.
- Launched global **Go nature. Go carton. communications campaign** to foster debate and promote sustainable packaging.
- Updated our **Carbon Calculator**, certified by the Carbon Trust, to ensure transparent updating and reporting of emission factors.
- Granted the option to use the Carbon Trust label **"Carbon Neutral Packaging"** on eligible packaging.
- Published our latest **life cycle assessment (LCA)** comparing the environmental performance of several alternative packaging systems for beverages and food available on the European market.
- Rolled out new **sustainability training** to help all our employees, particularly frontline staff, to become sustainability ambassadors.

Material aspect

Transparency/active communication in the value chain

Why it matters

At a time when the world needs leadership more than ever, to address urgent global challenges such as COVID-19 and climate change, trust has never been harder to come by. According to the 2021 Edelman Trust Barometer, an annual trust and credibility survey that has now been running for 21 years, a “rampant infodemic is fuelling widespread mistrust of societal leaders... [and] people don’t know where or who to turn to for reliable information.”

Against this chaotic backdrop, business has a vital role to play. “The high expectations of business to address and solve today’s challenges has never been more apparent,” says the report. Such trust in business has to be first earned and then carefully preserved. The report states that “the biggest opportunity to earn business trust is guarding information quality. Some 53% of respondents believe corporations need to fill the information void when the news media is absent. Communications from ‘my employer’ is the most trusted source of information (61%), beating out national government (58%), traditional media (57%), and social media (39%).”

We recognise that our business is built on trust – and that trust and transparency go hand in hand. We also recognise that there are increasing expectations around transparency across our value chain by our customers, not least because it is vital to ensuring our customers can meet and report on their own sustainability agenda. Consumers and other key stakeholders have increasing expectations, too, particularly in these turbulent and uncertain times.



Our approach

As the leaders in our industry, we want to be a benchmark for trust; for our customers, stakeholders and consumers alike. We strive to earn and preserve this trust through transparency, openness and active communication, which clearly demonstrates our purpose, our good governance, and our core values – along with the sustainability work that we do, by which we aim to lead by example.



Environmental reports since 1999

To build trust and transparency with our customers and as part of our approach to responsible sourcing across our supply chain, we work with leading sustainability assessment platforms, including Sedex, EcoVadis and CDP. We also assure credible third-party certification for key suppliers, utilising leading organisations such as Sedex, FSC™, Bonsucro and ASI. And we use science to inform our ambitions and targets whenever possible, for example in the case of our climate ambition, which is approved by the Science Based Targets Initiative. To read more on all these areas, see the sections on **Responsible value chain, Biodiversity and forests** and **Climate**.

We actively engage with our customers on a variety of sustainability topics. We also work with industry organisations, NGOs and IGOs, and multi-stakeholder initiatives around the world to raise awareness of sustainability issues, promote good practice and support specific projects.

For a list of examples of our partnerships, see our website [➤](#)

We widely communicate our activities, achievements and challenges around our sustainability agenda. We have been publishing environmental reports since 1999, and we have been reporting on broader sustainability issues since 2005. We have a dedicated sustainability area on our website and we also communicate our sustainability work through press releases, social media and industry events.

We conduct and publish research into consumer attitudes to the environment, such as our biannual environmental trends reports, Tetra Pak Index reports (including *COVID-19 and the Food Safety-Environment Dilemma* and *The Convergence of Health and Environment*), and various other white papers, case studies and articles.

For a full list of our reports, go to the Insights section of our website [➤](#)

We also have a long history of working with governments worldwide on policy issues related to sustainability, food packaging and healthy diets. We advocate for progressive, evidence-based policy to address societal challenges on a number of different topics. For more on this, see the section on **Our governance framework**.

Maxfield Weiss,
Executive Director CDP Europe



Awarded Leadership status with an A for both its climate change and forests disclosure with CDP, Tetra Pak is in the top 1% (one of only 16 companies) in Europe that achieved a double-A rating in 2020. Companies reaching the Leadership level represent best practice through their comprehensive disclosure of environmental data, thorough awareness of risks, demonstration of strong governance and management of those risks, and implementation of market-leading best practices. CDP congratulates Tetra Pak for achieving this level for the second year in a row, demonstrating continuously strong environmental management procedures.



Food protection and food safety

We are working to enhance communication around food protection and food safety, as well as on environmental performance information for our products, both packaging and equipment, and recycling guidance for our packaging. Extensive information on all these topics is available on our website.

In 2019 we launched our connected packaging platform, which transforms our carton packages into interactive information channels, full-scale data carriers and digital tools. For our customers, the connected package offers end-to-end traceability to improve production, quality control and supply chain transparency. For consumers, it means the ability to access vast amounts of information such as where the product was made, environmental performance and recycling guidance.

For recent Connected Package platform case studies, see the cases and articles section of our website [➔](#)

Environmental performance

Since 2018, we have worked closely with the Carbon Trust on an online Carton CO₂ Calculator, which is available on our [website](#). It is designed to show the GHG emissions associated with different packaging choices, which gives customers visibility and an understanding of the impact their packaging selection will have on climate change.

As a result of our ongoing work with the Carbon Trust, we and our customers have the option to use Carbon Trust labelling on selected qualifying packages. More generally, we actively encourage our customers to display appropriate environmental labelling, such as FSC™ and Bonsucro certification, in order to further transparency.

We conduct and commission LCAs to investigate the environmental impact of food packaging systems. LCA is a methodology used to assess the environmental impact associated with all the stages of a product's life, from the extraction of raw materials through to processing, manufacturing, distribution and end-of-life treatment. The value of such assessments was appreciated early in the company and we have LCAs investigating our product system dating as far back as the mid-1980s.

[For more on LCAs, see our website](#) 





Collection and recycling

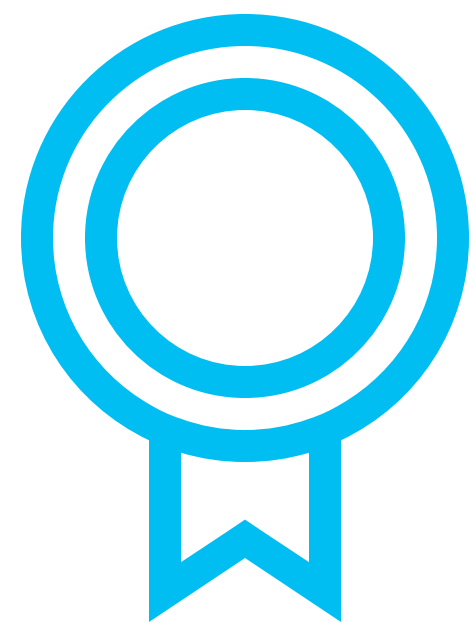
We report on our achievements and challenges around recycling both in our sustainability reports and on our website. Our approach to collection and recycling includes promoting consumer awareness and engagement, and we often conduct local campaigns to that effect in our markets.

**To find out more, see the section on
Circularity and recycling or visit our website** [➔](#)

What we did in 2020

CDP A listing

We were recognised for leading on environmental transparency and action by global environmental non-profit CDP, securing a place on its prestigious A List for tackling climate change, as well as acting to protect forests. By scoring companies and cities, CDP aims to incentivise and guide them on a journey through disclosure towards becoming a leader on environmental transparency and action. Tetra Pak is the only company in the carton packaging sector to be included in the CDP leadership band for five years in a row and to score an outstanding double “A” for climate and forests in 2020. CDP is widely recognised as the gold standard for corporate environmental transparency.



CDP A listing

EcoVadis top rating

We were rated in the top 1% of companies assessed by EcoVadis in our industry category. We were rated in the top 1% for environment; in the top 1% for sustainable procurement; and in the top 4% for labour and human rights.

New carbon calculator

We updated the Carbon CO₂ Calculator on our website, as we do periodically to ensure that the latest available emission factors are applied and managed in a transparent way. The latest version (version 7) is valid from January 2021. It has been certified by the Carbon Trust as capable of generating carbon footprints in compliance with PAS 2050, ISO 14044 and ISO 14067.

Carbon neutral labelling

As a result of our ongoing work with the Carbon Trust, in 2020 we were granted the option to use the Carbon Trust label “Carbon Neutral Packaging” in addition to “Reducing CO₂ Packaging”. For more on this, see [Climate](#).

Sustainability ambassadors

We delivered a range of sustainability training programmes, tailored to the needs of different internal audiences. We want everyone in the organisation to feel confident in discussing our environmental sustainability goals, challenges and actions with customers, friends and family.

We launched a new sustainability training offer as part of our learning catalogue, with the aim of ensuring that everyone in the organisation can feel confident in discussing our environmental sustainability goals, challenges and actions with customers, friends and family. The training is relevant for all employees but is especially useful for those with customer-facing and technical roles.

As part of our work to promote active communication, we launched an internal training campaign, Protect What’s Good and Protect the Planet, to help all our employees develop a consistent understanding of our promise and environmental sustainability actions and equip them to become sustainability ambassadors. The initial training consisted of an introduction, outlining our sustainability approach, and modules focused on climate, circularity and biodiversity.

We also piloted an advanced training offer in Cluster Europe and Central Asia business organisations, with the objective of enabling frontline staff to lead sustainability discussions with our customers. This will be rolled out to all Clusters and expanded in scope in 2021.

New life cycle assessments

We published our latest LCA, which compares the environmental performance of several alternative packaging systems for beverages and food available on the European market. The study shows that the impact of Tetra Pak carton packages on the climate is lower than other materials. Carton packages using plant-based plastics perform even better from a climate perspective – the study shows that the greater the share of renewable materials in the package, the lower the climate impact.

Other recent LCAs including wine packaging, plastic and paper straws for portion packs, carton packages with and without plant-based caps, carton packages versus PET bottles, refillable versus non-refillable beverage containers, and **Tetra Recart**® packages.

[To see our latest LCAs, go to our website](#) 



The COVID-19 pandemic has highlighted the need for strong evidence-based policymaking and communication in managing this global public health emergency. It has also revealed the risks of misinformation and disinformation through manipulation of media platforms, and amplification of false narratives, in particular regarding the pros and cons of mass public health interventions such as face masks or vaccination. The lessons are only too obvious for companies such as Tetra Pak, who are reliant on accurate, science and fact-based policy making on climate and sustainability – both internally and in the broader regulatory context. As we have seen, publics can easily be misled and confused by forces resistant to change and able to mount false, counter-narratives. This makes it all the more incumbent on progressive corporates such as Tetra Pak to make the case for a sustainability transition, in both its own and wider corporate practice, based on strong science, strong economics and a strong commitment to social justice. This will set Tetra Pak apart from the rest and is the clear blue water needed from companies, in a world at risk of greenwash.

Malini Mehra,
FRSA, chief executive, GLOBE International secretariat,
Sustainability Advisory Panel member

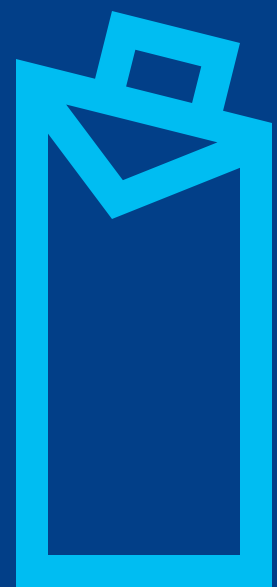


Spotlight

Go nature. Go carton.

In 2020, we launched a major global communications campaign, **Go nature. Go carton.** It sets out to help address the world's environmental challenges by fostering debate about sustainable packaging, laying out our approach in a new, more transparent way.

The campaign highlights the vital role packaging plays in feeding the world's growing population, helping to keep food safe, nutritious and available, while reducing loss and waste. At the same time, it acknowledges that packaging also causes problems for the planet: from greenhouse gas emissions, waste in our environment and expanding landfills, to the depletion of finite resources and limited recyclability.



Sustainable packaging

Go nature. Go carton. sets out our belief that a bold, multi-faceted ambition towards increasingly sustainable packaging can help mitigate climate change and address other environmental concerns while feeding a growing population. It lays out five key challenges:

- 1. Raw material and sourcing:** We need to make packaging of renewable or recycled materials, so we don't drain our planet of resources. At the same time, we need to source these resources in a responsible way respecting biodiversity and natural environments.
- 2. Production and distribution:** We need to make packaging that supports CO₂-minimised production and distribution to contribute to climate change mitigation.
- 3. Food protection and consumption:** We must continue to make packages that are safe and convenient – ensuring a resilient food system, where we reduce food waste and secure that food is available to everyone, everywhere.
- 4. Recycling:** Carton packages are recyclable. With our contribution the recycling rate of cartons has increased to 27% worldwide. But that is not enough. We must support the collection, sorting and recycling of packaging to advance the entire recycling value chain and scale the recycling of paper-based cartons globally.
- 5. End-of-life:** We need to reduce fossil input and maximise the use of materials with a reduced impact on nature, while supporting improvements in waste management and recycling of carton packages to increase recycling rates and contribute to a circular economy

Finally, the campaign explains our approach to meeting these challenges, which is to develop the world's most sustainable food package: one made entirely from renewable or recycled materials, fully recyclable and carbon neutral.

“We have a long history of transparency around our sustainability activities,” says Daniela Alves, Vice President Communications, Packaging Solutions & Commercial Operations at Tetra Pak. “But we recognised that expectations were growing for us to do more: that we needed to be more active in our communication about the global challenges we face, and about the steps we are taking to address them. As a leader in our industry, we need to acknowledge that packaging contributes to the problems the planet faces, and to lay out our approach to solving those problems. That is what the Go nature. Go carton. campaign sets out to achieve.”

The campaign will continue to be rolled out worldwide throughout 2021.

We are on a journey to deliver the world's most sustainable food package made solely from renewable or recycled materials, fully recyclable and carbon-neutral.



Planet.



Planet

Planet milestones	95
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We believe that businesses should make a positive impact on our planet. We develop and offer sustainable and innovative food processing and packaging solutions that can make a difference, helping protect and restore our planet's climate, resources and biodiversity. We consistently pursue actions across our full value chain that help create a sustainable tomorrow, without ever compromising on food safety or quality.

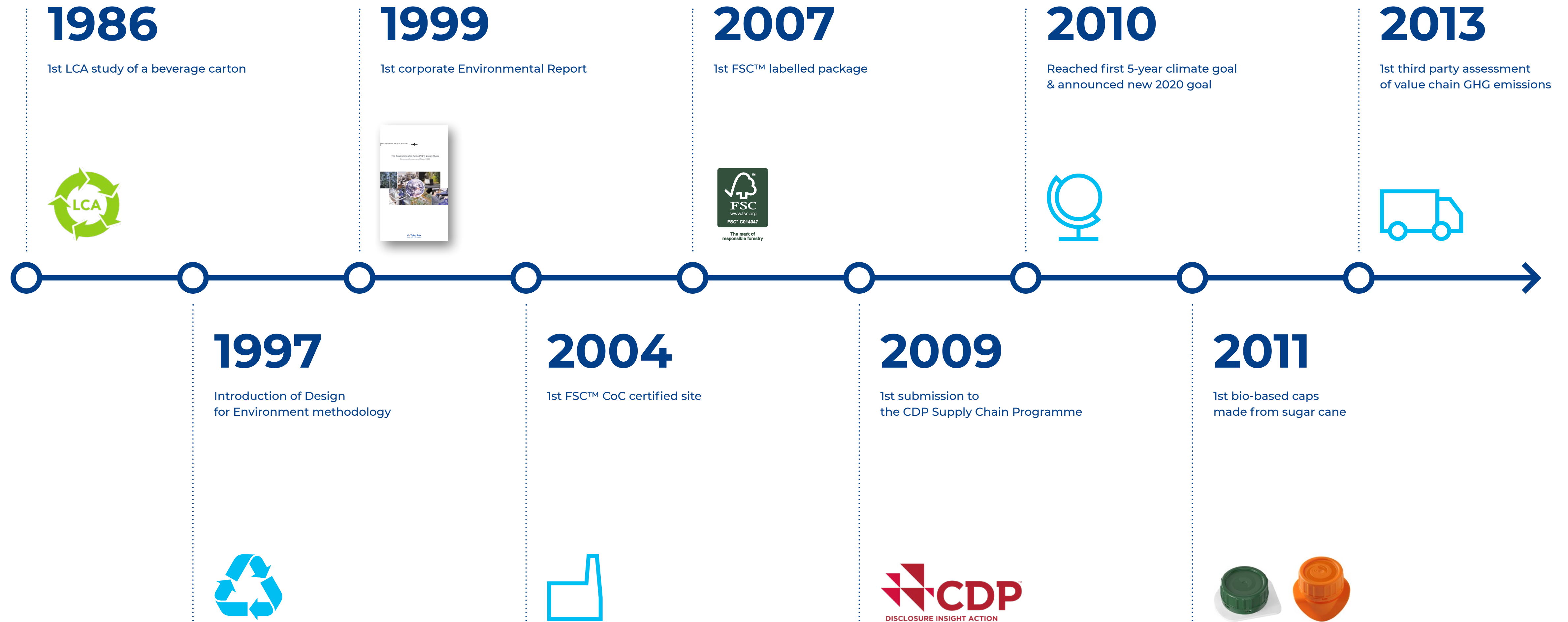
Material aspects

- *Contributing to a low-carbon society*
- *Promoting recycling and circularity*
- *Protecting biodiversity and ecosystems*
- *Maintaining fresh water availability*

Supporting the UN SDGs



Planet milestones 1986 – 2013



Planet milestones 2014 – 2021

2014

1st LEED “Platinum” certified site (Chakan, India)
All sites FSC CoC certified



2016

200 bn FSC™ labelled packages (since 2007)
Joined RE100



2018

½ billion Tetra Rex® Plant-Based packages sold
Received EcoVadis gold rating



2020

Achieved our 2020 climate goal, decoupling economic growth from GHG emissions across the full value chain
Only carton packaging company on the CDP leadership band for five years in a row – double “A” for climate and forest
Limited commercial launch of first aseptic package with non-foil barrier
1st to offer carbon neutral label – Tetra Rex® Plant-based packaging certified as carbon neutral by Carbon Trust
Launched breakthrough low-energy equipment line for processing juices and still drinks



2015

Tetra Rex® Plant-based launch; world’s first fully renewable package



2017

Climate targets approved by SBTi



2019

Bonsucro Membership and Chain of Custody Certification
Signatory of the New Plastics Economy Global Commitment
Paper straws released in Europe



www.bonsucro.com

2021*

Cartons integrating attributed recycled polymers available for food and beverage manufacturers
1st company in the food and beverage packaging industry to be awarded the Roundtable on Sustainable Biomaterials (RSB) Advanced Products certification
Portfolio of tethered cap solutions ready to deploy



* As of June 2021

Climate

Our ambition is to protect the planet by mitigating climate impact and reaching climate stability through the energy reduction and decarbonisation of our operations and products, as well as the full value chain.

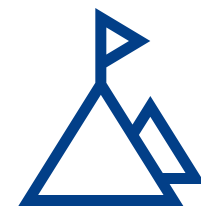


At-a-glance



Commitments

- **Reach net zero GHG target in Tetra Pak operations** by 2030 (scope 1 and 2 and business travel).
- **Reach net zero GHG ambition across the value chain** by 2050 (scope 1, 2 and 3).
- **Reach -46% GHG reduction across value chain** by 2030, in line with 1.5°C (SBTi commitment, baseline 2019).
- **Source 100% renewable electricity in our operations** by 2030 in line with RE100 commitment.
- Continuously increase the use of renewable materials and **launch fully renewable aseptic package by 2023**.
- Strive to maintain our **CDP Climate A-List leadership ranking**.



Achievements in 2020

- **Achieved our 2020 climate goal**, decoupling economic growth from GHG emissions across the full value chain, scope 1, 2, 3 (-19% versus 2010).
- **Achieved an outstanding -70% GHG reduction** in our own operations from 2010 to 2020, scope 1 and 2.
- Announced a **net zero climate goal** and SBTi approved science based targets across all scopes 1, 2 & 3.
- Received outstanding **“A” score for Climate** and was named “Supplier Engagement Leader” by CDP.
- **Technical validation** with limited commercial launch of first aseptic package with non-foil barrier.
- Introduced **carbon-reduced and carbon neutral package certification** and labels with Carbon Trust and launched **Tetra Rex® Plant-based** package with carbon neutral label in Ireland.
- Launched **breakthrough low-energy equipment line** for processing juices and still drinks.
- Extended the use of **renewable electricity** across our factories to 83% in 2020, up from 69% in 2019, surpassing our target of 80%.
- Sold **13.5 billion plant-based packages** and **7.5 billion plant-based caps**, made from segregated plant based-polymers, fully traceable to their sugarcane origins.

Material aspect

*Contributing
to a low-carbon society*

Why it matters

Climate change is affecting every country on every continent. It is disrupting national economies and affecting lives. According to the UN, the last decade was the warmest ever recorded and global warming could reach 4.1°C by the end of the century with irreversible impacts on the planet. The initial objective to keep temperatures to below 2°C above pre-industrial levels is not enough. Industry and governments need to urgently act to reduce emissions in line with the 1.5°C target as set by ambitious programmes, such as the Paris Agreement, UN Global Compact and the SBTi.

This is the decade of action, and we are committed to playing a key role. The global food supply chain system is responsible for nearly one third of global GHG emissions¹. Farming, processing and distribution of food has a massive climate footprint. Materials for packaging alone cause more CO₂ emissions than global aviation prior to the COVID-19 pandemic. We want to contribute to a more sustainable future for our planet, by improving the carbon footprint of the packages and the equipment we offer to our customers, as well as that of our own operations.

1. <http://www.fao.org/news/story/en/item/1379373/icode/>

Johan Rockström,
Director,
Potsdam Institute for Climate Impact Research,
Sustainability Advisory Panel member



The scientific message is clear, all actors in the world including companies must cut greenhouse gas emissions by half by 2030 and collectively reach net-zero by 2050. Holding the 1.5°C line furthermore requires that we secure all natural carbon sinks on Earth, which translates to circular and resource efficient business models. This in turn, necessitates business responsibility across entire value chains – from where energy and materials are sourced, and how products are used, recycled and reused. We cannot negotiate with Earth’s safe space; we can only adapt within it.

Our approach

We are committed to reducing climate impact not just in our operations, but right the way across our value chain, from sourcing to production and from use to disposal of our products and equipment. This commitment is key to our Strategy 2030 goal to **Lead the sustainability transformation**, which is formed of two parts: Lead with low-carbon circular economy solutions and Enhance sustainability across the value chain.



2020 climate goal achieved

We have a long history of working to mitigate GHG emissions. We have been collecting data on energy use and GHG emissions from across our organisation on an annual basis since 1999. To ensure we have comprehensive and comparable figures, we base our accounting on the guidelines of the GHG Protocol, widely acknowledged as the leading methodology for the management of GHG emissions using Sphera Corporate Sustainability Software (formerly called SoFi). Our scope 1 and 2 GHG accounts have been audited by an independent third party since 2006 and our scope 3 accounts since 2013.

To see our latest environmental performance data, go to our website [➔](#)

We have been setting and meeting climate goals since 2005. We have exceeded our latest target to cap 2020 impact across the value chain at 2010 levels despite growth. Our 2020 GHG emissions showed a 19% reduction from 2010, bettering our targeted savings by more than 17 million tonnes over the period. We have done this by focusing on the following four key areas:

- 1**
Partnering with suppliers and other stakeholders along the value chain to significantly reduce carbon footprint.
- 2**
Lowering energy-related emissions in our own operations through energy conservation, improvements in energy efficiency, installing on-site solar photovoltaics and purchasing renewable energy.
- 3**
Helping customers reduce energy consumption and food loss through high-performance processing and packaging solutions and services.
- 4**
Developing sustainable recycling value chains, via collaboration with customers, waste management companies, recyclers, municipalities, industry associations and equipment suppliers.

1

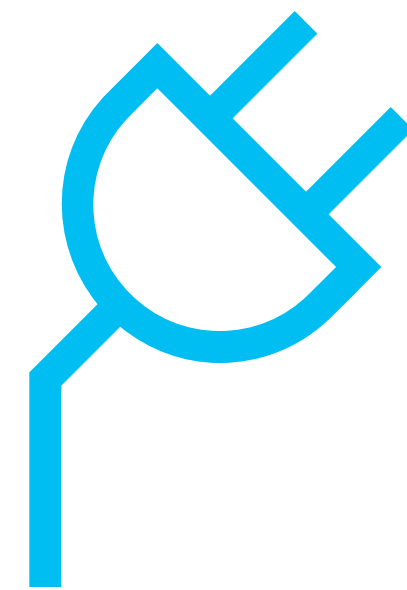
Partnering with suppliers and other stakeholders along the value chain to significantly reduce carbon footprint.

We work with our suppliers to cut upstream carbon emissions from purchased goods and transport, which together account for 41% of our value chain total. Our management process for base material suppliers includes setting reduction targets for CO₂ emissions and we report supplier performance against these. We focus on improvement opportunities and allocate purchasing to maximise carbon footprint reduction. Our work with voluntary certification organisations, such as FSC™, Bonsucro and ASI, further embeds reducing carbon emissions and managing impact from land use change into our base materials sourcing.

This approach has enabled us to cap and even slightly reduce supplier emissions between 2010 and 2020, despite significant growth in sourcing to meet our production growth. For more on how we work with our suppliers, see the sections on **Responsible value chain** and **Biodiversity and forests**.

2

Lowering energy-related emissions in our own operations through energy conservation, improvements in energy efficiency, installing on-site solar photovoltaics and purchasing renewable energy.



345 GWh saved since 2010

Direct and indirect emissions from our operations (scopes 1 and 2) together with business travel-related emissions represent only a relatively small percentage of our value chain emissions – 1%. Emissions from handling operational waste and upstream fuel and energy related emissions total another 1%. Nevertheless, these are key for two reasons. First, these are the areas over which we have most direct control, and as part of our goal to lead the sustainable transformation, we want to set an example and be a benchmark for sustainable operations: minimising waste, energy and water consumption. Second, our activities make a significant impact on emissions elsewhere in the value chain: for example, the waste rates in our factories impact the amount of base materials we need to source from our suppliers.

Over the last decade, we have significantly reduced our own operational footprint, cutting Scope 1 + 2 emissions by some 70% since 2010 through the following initiatives and activities:

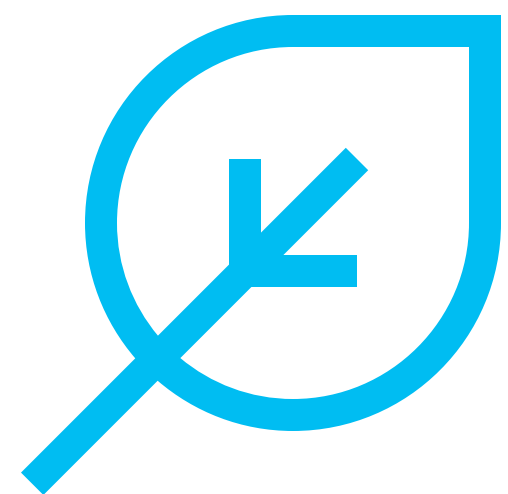
Investing in energy efficiency

Since 2011, we have invested more than €16 million in energy efficiency, preventing energy use from increasing by 23% over this period. Our energy audit programme is a major contributor to this increased efficiency, realising total energy savings of 345 gigawatt hours since 2010.

World Class Manufacturing

Another significant contributor to general efficiency, including energy efficiency, in our operations is our use of World Class Manufacturing (WCM), a systematic approach to reducing waste, minimising water loss and reducing energy consumption. Applied across all our operations, it has led to a 63% reduction in total waste and a threefold increase in productivity since 1999.

Today, we are considered a world leader in WCM. Four of our factories have received the World Class award, the highest level of the prestigious Total Productive Maintenance (TPM) awards by the Japan Institute of Plant Maintenance.



70% GHG reduction over 10 years

This World Class award is presented to facilities that have achieved outstanding levels of production quality, reliability, efficiency and environmental performance. Only 26 plants in the world have achieved World Class status: our facilities represent a sixth of this total. Out of the 38 Tetra Pak packaging and additional material factories currently in operation worldwide, 36 have received one or more TPM awards.

In the latest round of awards, announced in February 2021 based on assessments conducted in 2020, four of our factories received new accolades: Hjørring (Advanced Special Award for TPM Achievement); and Sevilla, Châteaubriant and Mexicali (all Award for Excellence in Consistent TPM Commitment). The global pandemic made the 2020 award process especially challenging, with all the preparing assessments and final audits being carried out remotely.

Greener buildings

In addition to our production processes, the quality of our buildings makes a significant difference to the sustainability and energy efficiency of our operations. For example, our newest carton packaging material factory – inaugurated in Binh Duong, Vietnam – features solutions that reduce energy consumption by up to 36%. In all new projects and major fit-outs, where possible, we now aim for Gold level certification from Leadership in Energy and Environmental Design (LEED), a leading international certification standard. Even when we choose a small office, sustainability and accreditation of the building is a key deciding factor.

Renewable electricity

In 2016, we made a public commitment to RE100 to source 100% renewable electricity by 2030. Our use of renewable electricity has risen from 20% in 2014 to 69% in 2019, and we have achieved our target of 80% in 2020. Our use of renewable electricity has risen from 20% in 2014 to 69% in 2019. We extended the use of renewable electricity across our factories to 83% in 2020, surpassing our target of 80%.

This renewable electricity journey has included the installation of solar panels across our operations. To date, we have installed approximately 3.5 MW of solar PV (or over 10,000 panels), delivering low carbon electricity whilst saving operational costs. We have also purchased renewable certificates, being one of the first to do so in countries such as Thailand and South Africa.

We also work towards reducing the impact of transportation and travel of both our products and our people. For example, business travel accounted for emissions of some 38,000 tons CO₂e in 2019. This has been significantly reduced during the COVID-19 pandemic (14,000 tons CO₂e in 2020) and new remote ways of working will help keep this figure down going forward.

3

Helping customers reduce energy consumption and food loss through high-performance processing and packaging solutions and services.

The emissions from the energy-using processing and packaging equipment that we sell to our customers is the single biggest contributor to our value chain emissions, accounting for 49% of the total. It is also the area where we have seen the biggest improvement, with a 23% reduction overall, making a major contribution to our 2020 climate goal.

Many of our customers also have climate goals. By offering them ways to reduce their impact through better and more efficient equipment and new environmental improvement services we can significantly help them meet their goals, as well as our own. As an end-to-end solutions supplier, we are able to offer a full plant performance perspective. The following multi-step approach shows our full range of sustainability offerings:

3A – Avoid

The best way to save energy and water is not to use it at the first place. This we enable by innovative equipment, lines and plant solutions. Key examples include:

- OneStep technology (UHT)
- New Production Concept
- **Tetra Pak® PlantMaster** (see [Water](#))
- **Tetra Pak® Separator:** Airtight and Encapt technology
- **Tetra Pak® E3/Speed** with eBeam

3B – Optimise

Optimisation of operational performance (efficiency, availability) will have a positive impact on a customer's environmental impact. Our Services to support our customer to optimise their operations include:

- Maintenance Services, to secure equipment reliability.
- Expert Services, including Plant and Line Optimisations, Food Safety and Quality Solutions and Environmental Assessment Services.

3C – Recover

Where energy and water consumption cannot be avoided, they should be recovered. Utilising our food application and processing competence, we support our customers with product, line and plant recovery solutions for water, energy and product losses, such as:

- Water, solids and detergent recovery from product flushes and cleaning solutions.
- Energy recovery solutions.

3D – Compensate

As our customers increasingly switch to renewable energy to decarbonise their operations, we support their journey by providing customised engineering solutions and upgrades to secure the continued performance of equipment, lines and plants.

Sustainable by design

Environmental assessment is a part of our technology and product development process, identifying and addressing environmental targets, risks and opportunities.

A great example of a sustainable innovation in our packaging equipment is eBeam, a technology developed by us in collaboration with our then partner COMET. The eBeam technology sterilises packaging material using electron beams and replaces the traditional hydrogen peroxide sterilisation process for packaging material while guaranteeing the same sterilisation performance. This can reduce energy consumption by as much as one-third. It also radically reduces water use by simplifying the recycling process, and reduces packaging and product waste as there is no need to discard packages following a stop in production – all of which further reduce environmental and climate impact.

To find out more, see the infographic on our website [➤](#)

In 2020, we acquired the eBeam device development and manufacturing operations from COMET, further boosting our ability to deliver sustainable and higher efficiency filling lines for customers.

While packaging represents the lion's share of our business with our customers by value, it represents a small share of our customers' contribution to emissions: just 4%, with distribution equipment adding an additional 2%. Processing accounts for the rest, with dairy processing dominating this segment on 63%. To put this another way, dairy processing accounts for more than 30% of Tetra Pak's total value chain emissions – ten times more than all of our own operations combined, or a little more than all of our packaging paperboard sourcing.

Consequently, innovation in this area makes a significant contribution both to our climate goals and those of our customers. Hence the importance of breakthroughs such as our OneStep technology, which removes the multiple steps of pasteurisation and intermediate storage in the traditional process of preparing milk from powder before UHT treatment.

This can reduce energy consumption by 31%, water consumption by 56% and reduce overall carbon footprint by 66%.

Another example is **Tetra Pak® Separators** equipment, which are unique in using two technologies – **AirTight and Encapt™** – that together boost operating performance and cut energy use by up to 40% compared with standard alternatives.

For an illustration of how this works in practice, read “A day in the life of a super-efficient dairy separator” on our website [➤](#)

To learn how German dairy Deutsches Milchkontor reduced energy consumption when separating milk by 30% with Encapt™, read the case study on our website [➤](#)

A performance guarantee for Encapt was released in early 2020, followed by a guarantee for standard machines. In 2020 Polynode technology was also released, enabling customers to change only a disc stack and achieve higher capacities without sacrificing performance, effectively making machines bigger, but only on the inside and without additional utility usage.

Additionally, a ten-year lifetime guarantee has been released for the separator bowl which can be used for every Tetra Pak Separator, demonstrating our confidence in the quality materials we use to produce separators. These initiatives help address our customers demand for sustainable, good quality solutions that will deliver value to their business for many years to come.

Other recent energy-saving innovations include our high shear mixer dedicated to cold emulsions, which has 21% lower energy consumption per batch compared with the competition benchmark, cutting GHG emissions by 45% per kg of product. And ongoing R&D has driven both increased energy efficiency and yield in our high-capacity Extrusion, Filling and Moulding Best Practice Ice Creams lines: their GHG emissions have fallen by 18%, 27% and 40% respectively over the last decade (based on 2020 figures versus 2010 baseline).

4

Developing sustainable recycling value chains, via collaboration with customers, waste management companies, recyclers, municipalities, industry associations and equipment suppliers.

For more on this, see the section on **Circularity and recycling**.



What we did in 2020

Net zero goals

To follow on from our achievements with our 2020 climate goal, in June last year, we set an even more challenging ambition: to achieve net zero emissions across the value chain by 2050, supported by an intermediate 2030 target of net zero carbon emissions across our own operations. To achieve these goals, we will continue to focus on the same key areas outlined above. For any residual emissions we are actively investigating nature-based solutions for storing carbon from the atmosphere. We believe it is important not just to focus on the carbon but also the wider associated sustainability benefits such as supporting biodiversity (see the section on **Biodiversity and forests**) and providing local communities with work.

Emissions reduction targets

In parallel with our new net zero goals, we also set emissions reduction targets for 2030 in line with 1.5°C according to SBTi across scopes 1, 2, and 3. This is what the latest climate science has told us is needed to prevent the most damaging effects of climate change. For us, translating a 1.5°C scenario into an absolute GHG emission reduction target equates to a 46% reduction in value chain emissions by 2030 (versus 2019 baseline). These new figures update our earlier commitments from 2017, when we became the first company in the food and beverage industry to have our climate impact reduction targets approved by SBTi.

Boosting solar PV

We continued to make progress towards our target of 100% renewable electricity in our factories, reaching 83% in 2020, up from 69% in 2019. We sourced 100% renewable electricity for all our operations in Mexico and Thailand for the first time. We also commissioned total of nearly 850 kilowatts of solar photovoltaic capacity at our factory in Rubiera, Italy. This represents more than 2,500 solar panels, and will generate more than 1,000 MWh of electricity per year, or approximately 5% of the factory's total annual demand, yielding annual carbon savings of around 450 tonnes CO₂e. We are also engaging with industry stakeholders including REBA and the RE100 initiative to try to facilitate the sourcing of renewable electricity globally.

Our factory in Izmir, Turkey, received the Environmental Project Award from the Aegean Region Chamber of Industry. The Award recognises the factory as one of the most environmentally-friendly in the region, for its significant energy and water savings and exemplary waste management practices.

We launched a new initiative, “Join us in protecting the planet”, with all base materials suppliers, as a call to action to reduce GHG emissions in our supply chain by 50% by 2030. For more on our work with suppliers, see the section on **Responsible sourcing**.

Design for recycling

Our carton packages are already recyclable¹, but through design for recycling we can do more to increase recycling levels and keep recovered materials in use. We continued to make a step change in levels of investment in sustainable innovation, to accelerate the development of a package that is made solely from renewable or recycled materials, with a simplified material structure and a greater share of paper-based content.

Our goal is to use as much renewable and recycled material as possible in our packaging, as this is essential to our carbon neutral circular economy approach. We believe that a circular economy – in which manufacturers design out waste, reuse and recycle materials and regenerate natural systems to reduce impact on the environment – is an essential part of sustainability today.

However, we believe that this approach needs to go further: it must also account for the carbon impact of manufacturing and, particularly, raw materials. Materials for packaging alone cause more CO₂ emissions than global aviation pre-COVID². Yet plant-based renewable raw materials can have a positive effect, by reducing carbon emissions as they grow. A 2016 EU Bioeconomy Report estimates that European forests and the forest-based bioeconomy could capture 25% of current CO₂ emissions within the coming two to three decades with the right policy incentives. For more on our new package development, see the section on **Circularity and recycling**.

1. Carton packages are collected and recycled worldwide, where waste management and recycling infrastructure is in place

2. Material Economics analysis; IEA – Energy Technology Perspectives 2017. <https://www.iea.org/etp/>

First non-foil aseptic solution

As part of our packaging development journey, in 2020 we carried out a technical validation in the form of a limited commercial launch of our first non-foil aseptic packaging solution, which replaces the aluminium layer with a polymer film applied with a Tetra Pak proprietary coating. This coating offers a robust solution that is effective and equally safe as our current foil barrier, but has a significant climate impact reduction. An LCA to quantify this reduction is still pending, but consider that our aluminium represents some 5% of our total base materials by weight but around one third of their GHG emissions.

The new barrier is our first-generation non-foil solution, and we will continue to work on improving our offering through sequential tests of packages with increased renewable and fibre content, without ever compromising food safety. We aim to field test an aseptic package made fully from renewable sources by 2023.

New JNSD line

We launched a new, first-of-its-kind low-energy processing line for juice, nectar and still drinks (JNSD) to take beverage processing to a new level of efficiency. Instead of pasteurising the whole volume of the product, the new production line separates out water and pasteurises only the concentrate. Water is treated separately with filtration and UV light which requires a lot less energy. In the new JNSD line customers reduce energy consumption up to 67% and water consumption used for CIP, sterilisation and product change-over is cut up to 50%.

CDP recognition

We received an “A” score from CDP for our work to tackle climate change, as well as for our forest stewardship, with CDP also recognising us as a “Supplier Engagement Leader”, as well as for our forest stewardship. We are the only company in the carton packaging sector to be included in the CDP leadership band for five years in a row and to score an outstanding double “A” for Climate and Forests in 2020. Only 1% of the 5,800-plus companies scored in 2020 achieved a double “A” rating through CDP’s process, widely recognised as the gold standard of corporate environmental transparency. Through significant demonstrable action on climate and deforestation risks, we are leading on corporate environmental ambition, action and transparency worldwide.

PDC goes “travel-free”

We are committed to helping our customers turn concepts into fully-fledged commercial products – tested, evaluated and modified to perfection. We do this through product testing with our customers. In most cases, this means that our customers come to one of our 10 Product Development Centres (PDCs) and work with us to innovate and develop the perfect solution for the product they want to manufacture.

To support our customers during the pandemic and to reduce emissions, we launched a new “travel-free trial” service at our Lund PDC. In 2020, 390 people used the new service, thereby avoiding travel and saving approximately 200 tons of GHG emissions. See the section on [Food availability](#).

Carbon neutral package

We became the first packaging company to offer customers the opportunity to label their packages with the Carbon Trust carbon neutral label. Our **Tetra Rex® Plant-based** packaging has been certified as carbon neutral, in accordance with the internationally recognised PAS 2060 standard by the Carbon Trust. The Tetra Rex Plant-based package is the world's first, and still only, fully renewable beverage carton package. It is made entirely of plant-based, certified materials including paperboard from FSC™-certified forests and other controlled sources and Bonsucro-certified polymers made from sugarcane.

The new carbon neutral certification reflects our efforts to prevent, reduce and mitigate carbon emissions in the manufacture of these packages, maximising energy efficiency and reducing carbon emissions across each stage of the life cycle, from the extraction of raw materials and manufacturing to transportation and recycling. The remaining emissions are offset with investment in the following Gold Standard projects: the Ceara Renewable Energy Biomass bundle project in Brazil and the Cambodia Water Filters project.

The new label builds on a long history of carbon footprint reporting with the Carbon Trust. For more on this, see the section on **Transparency and active communication**.

Silvana Centty,
Senior Manager at the Carbon Trust



We are proud of our work with Tetra Pak to provide its customers with the Carbon Trust Product Footprint label on Tetra Pak's packaging, demonstrating the importance of transparency when communicating the footprint of packaging products. Through the innovative use of bio-based materials and replacing fossil-based materials, Tetra Pak has demonstrated up to 25% carbon reductions for a broad range of packaging products. This allows its customers to communicate to consumers Tetra Pak's reduction achievements and on-going commitment to reduce carbon emissions across the value chain.

Spotlight

Collaborative innovation

We are increasingly collaborating with innovation partners to help us tackle the climate and other sustainability challenges we face. For example, we have introduced a new collaborative innovation model with leading paperboard producers. This includes tackling issues such as carbon emissions, use of non-renewable raw materials and limited recycling.

To find out more, see our interviews with Francisco Razzolini at Brazilian paperboard producer Klabin and Carina Rydén Pettersson at Tetra Pak on our website [➤](#)

We are also collaborating to raise the amount of renewable material in our packaging.

For more on this, see our interviews with Malin Ljung Eiborn from BillerudKorsnäs and Eva Gustavsson from Tetra Pak on our website [➤](#)

In July 2020, we announced a five-year strategic partnership agreement with Lund University with the ambition to promote innovative approaches to sustainable products, businesses and society. This agreement builds on our rich history of collaboration on packaging logistics, food technology and packaging materials. We are both also core members of Treesearch, Sweden's largest research collaboration platform to develop new and sustainable materials from forest resources. Other external partners include Plug & Play's Innovation Platform and Cleantech Impact Accelerator in Copenhagen, who are helping to provide long-term development support for our new sustainable solutions.

Torbjörn von Schantz,
Vice-Chancellor of Lund University, 2020



Tetra Pak is a key strategic partner and we have collaborated for many years. Academia and industry need to work closely in the long-term to solve complex societal challenges such as sustainability, which is very much in focus for this collaboration.

Circularity and recycling

Our ambition is a world where all packages are collected, recycled and never become litter. Carton packages are already recyclable, but we are on a journey to accelerate carton package recycling at scale globally, as well as to innovate for improved “design for recycling” and to use recycled materials.

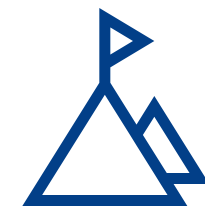


At-a-glance



Commitments

- Reach **70% recycling rate in Europe by 2025**, and 90% by 2030.
- Ensure **recyclable packaging** according to leading definitions such as the New Plastics Economy Global Commitment by 2025.
- Use **10% of polymers with recycled content** in our packaging in Europe by 2025.
- Expand **paper straws offer and production** to meet demand in Europe by 2021 and globally by 2025.
- Ensure all caps and lids on all Tetra Pak cartons placed on the market in EU are **tethered by 2024**.
- Continue our accelerated progress and increased investment towards developing the **world's most sustainable food package**: a carton that is made solely from responsibly sourced renewable or recycled materials, is fully recyclable and carbon-neutral
- Continue to work on a regional and local level to develop and scale up collection and recycling on the ground, **towards a circular economy**.
- Continue to play an active role in the top **circularity and recycling industry initiatives**, and to join and/or help form new partnerships and alliances.



Achievements in 2020

- Led and implemented a wide range of activities across the recycling value chain in local markets around the world, contributing to **increased global carton package recycling rate of 27% in 2020**.
- **Increased carton package recycling facilities** to more than 170 worldwide.
- Became the first company in the food and beverage packaging industry to be awarded **Roundtable on Sustainable Biomaterials (RSB) Advanced Products certification**, paving the way for the introduction of attributed recycled polymers in our carton packaging.
- Accelerated development of the **world's most sustainable food package** with €100 million investment per annum.
- Supported the development of the first in a series of **"golden design rules"** by the Consumer Goods Forum (CGF).
- **Worked with recycling partners across Europe** to increase capacity for recycling polyAl (polymer and aluminium), the non-fibre components of a carton package.
- Supported the **CGF's position paper on extended producer responsibility (EPR)**.
- Accelerated action through industry platform participation, including becoming a **founding member of GRACE**.
- Became a member of the **Holy Grail 2.0 consortium**, to work on the viability of digital watermarking technology for sorting of packaging for recycling.

Material aspect

Promoting recycling and circularity

Why it matters

By 2050 the world's population is predicted to reach 9.1 billion, which will require an increase of 70% in food availability. Packaging helps keep food safe, nutritious and available. And, with 33% of food lost or wasted each year according to the UN FAO, high-performance packaging plays a critical role in today's global food delivery system.

However, packaging can also have a detrimental effect on the environment, from GHG emissions to waste to the depletion of finite resources and limited recyclability. Recycling has come to be seen as the “go-to” solution, and many countries are setting ambitious targets. In Australia for example, all packaging must be recyclable, reusable or compostable by 2025. In China, 40% of carton packages must be recycled by 2025. And in the European member states, 65% of all packaging is to be recycled by 2025 and 70% by 2030.

We see it as our fundamental obligation to support the global and regional collection, sorting and recycling of packaging. That's why, in synergy with food manufacturers, municipalities, recyclers and other stakeholders across the industry, we are on a journey to develop and scale the recycling of paper-based cartons, helping to make them the world's most sustainable food package.

We believe that collective action is key. Together with more than 170 active recycling operations already today, we are working to advance the entire recycling value chain. By strengthening global carton recycling infrastructure, we can ensure cartons are transformed into new raw material and products, keeping valuable resources in use to help build a circular economy.



Our approach

Recycling has long been a vital part of what we do at Tetra Pak. Our carton packages are made of approximately 70% paper, which is a renewable resource, and they are recyclable. With our contribution, 27% of carton packages worldwide are already being recycled. But for us that is not enough, and we are continually seeking opportunities across the entire recycling value chain to improve how cartons get recycled and committed to ensure our cartons are recyclable according to new and leading definitions, such as the one for the Ellen Mac Arthur Foundation's New Plastics Economy.

Circularity and recycling form an important part of our sustainability strategy. Since 2019, we have been part of the New Plastics Economy initiative led by the Ellen MacArthur Foundation, and signatories to its Global Commitment. As part of this commitment, we established a number of clear goals. We have met an important milestone towards the goal of replacing plastic straws by launching a paper alternative – becoming the first packaging company in Europe to do so – and we are now working to scale up production to meet global demand by 2025.

The area of circularity and recycling is developing fast and we are committed to contributing with our knowledge and experience, working together with policy makers and the industry, as well as proactively adopting new learnings and policies.

Other goals we are working towards include:

- Increasing recycling of polyAl (see **Spotlight** story) – the non-fibre components of a carton package – both when they are recycled as a blend and when they are recycled separately.
- Incorporating a minimum of 10% of polymers with recycled content on average across our carton packages sold in Europe by 2025.
- Using polymers with recycled content – derived from the polymer fraction in carton packages – for secondary packaging materials.

These goals, and our approach to circularity and recycling generally, have two main areas of activity. The first focuses on the design of and materials used in our packaging. We are working to create the world's most sustainable food package: one that is made entirely from renewable and recycled materials, and which improves design for recycling even further through a simplified material structure and increased paper-based content. In short, a package that has circularity and recycling "built in" – along with anti-littering measures, too. And one that minimises dependency on fossil-based resources by replacing them with renewable or recycled materials, which are always responsibly sourced.

For more on responsible sourcing, see the section **Biodiversity and forests** and **Responsible value chain**. For more on our journey towards the world's most sustainable food package and the Go nature. Go carton. initiative, see the section on **Transparency and active communication**.

The second focuses on the new life of our packages after use. We are working to drive consumer awareness and engagement around recycling; support collection systems and sorting technology improvements; contribute to the expansion of recycling capacity and solutions; and grow recycled material use end applications. We know that we cannot achieve alone our long-term ambition that all packages are collected, recycled and never become litter, so we are actively embracing global and local initiatives.

Trewin Restorick,
Founder and CEO, Hubbub
and Sustainability Advisory Panel member



It is incredibly encouraging that, based on this full life cycle analysis, Tetra Pak is investing significantly to make it easier for consumers to recycle, to reduce the likelihood of littering and to promote circularity. Tetra Pak recognises that it operates in markets with a diversity of waste management systems and there is growing emphasis on the creation of new partnerships, ensuring that recycling rates increase through closer collaboration with key stakeholders. Through this insight, investment and collaboration Tetra Pak is on a robust path to deliver the ambition to create low carbon packaging which reduces food waste and is part of the circular economy.

Developing the world's most sustainable food package

Our accelerated development journey towards the world's most sustainable food package – a carton that is made solely from responsibly sourced renewable or recycled materials, is fully recyclable and carbon-neutral – represents arguably the biggest change to our portfolio since the aseptic package was first introduced in the 1960s. It involves a step-change in investment, focused on the following four key development workstreams:

Renewable materials

We are working to increase the share of renewable materials, for example by replacing layers of fossil-based plastic with plant-based alternatives. To find out how we are doing this, see the sections on [Climate](#) and [Biodiversity and forests](#).

Recycled content

We are working with suppliers to incorporate polymers with recycled content into our packaging materials and to explore the potential for incorporating recycled fibres from carton packaging into our paperboard, creating a closed loop, all the while ensuring that we maintain our high standards of food safety. We are already collaborating with customers to use recycled content in secondary packaging in some markets.

What we did in 2020

- In line with our commitment to incorporate a minimum of 10% of polymers with recycled content on average across carton packages sold in Europe by 2025, we worked with our partners to introduce cartons with attributed recycled polymers made via chemical recycling. These polymers, which offer the same specification and product purity as virgin plastic, will be available for our packaging from 2021. We are also the first food and beverage packaging producer to be awarded RSB Advanced Products certification, a guarantee that the recycled elements of the material have been produced sustainably.

For more information, read [our press release on our website](#) 

- We developed a protective film for use as secondary packaging that comprises 50% post-consumer recycled plastic. The film is recyclable, and offers excellent performance and appearance. It is now available to customers, and has already been deployed across Europe.

Sustainable and anti-littering openings

Our work to develop sustainable packaging solutions includes focusing on innovations designed to tackle the problem of litter. In recent years, this has become a priority area, driven by the need for legal compliance and customer demand. Our anti-littering solutions strategic programme provides a focus for our activities in this area.

What we did in 2020

- Following the launch of our paper straws in 2019 – a first for Europe – this year we focused on expanding the range of packages for which paper straws are available, while increasing production capacity in order to meet future demand. Under EU legislation, a ban on plastic straws will come into effect in 2021.
- We accelerated innovation in the area of tethered caps – closures that can't be detached from the main body of the package. The aim is to ensure that all Tetra Pak customers are ready to comply with new EU legislation set to come into force in July 2024. The first such cap to be released on the market, the HeliCap™ 26 Pro closure, features a new screw and flip concept with a self-locking hinge, securing food protection while providing convenience for in-home consumption.

Read more about how we are accelerating action towards reduced littering on our website 

Elena Schmidt,
Executive Director (interim), RSB



In 2020, Tetra Pak became the first company ever to achieve RSB certification for circular polymers. This means that Tetra Pak's use of recycled polymers is contributing to the circular economy and reducing the use of virgin fossil resources – a vital step in reducing the impact of their industry on the environment. RSB certification is widely recognised as the most trusted and robust approach for sustainability certification of the growing circular and bio-based economies, and we are proud to have Tetra Pak lead the way in applying it for their innovations in the packaging industry.

Design for recycling

We are working to improving design for recycling by gradually increasing the fibre content and simplifying the structure of our carton packaging material to improve the attractiveness to recycle and keep recovered materials in use

What we did in 2020

- We started the technology verification through a limited commercial launch of our first package for ambient distribution without aluminium foil. For more on this, see our [Climate](#) section.
- We made great strides in building a network of partners to support our work in developing, testing and validating new materials and bringing them to market as quickly as possible.

[Read more about how we are working with partners through our Voices of Innovation initiative on our website](#) 

- As part of the Holy Grail 2.0 consortium, we are working with more than 85 industry partners to explore the viability of digital watermarking technology to support more accurate sorting. At a trial in 2019, our carton packages reached close to 100% detection accuracy.
- Working in close collaboration with Kadant, a global manufacturer of systems for recovering recycled fibres and processing virgin fibres, we have installed a high consistency lab pulper with polyAl washing and extraction plus a number of other devices at our site in Lund, Sweden. The new facility will enable the rapid and efficient trialling of new developments and technologies.

Collection and recycling

Recycling is one of the key enablers of a low-carbon circular economy. We have worked to develop collection and recycling infrastructure in all of our markets for many years. This pioneering work has played a vital role in increasing the number of **facilities that recycle carton packages worldwide** from 40 in 2010 to more than 170 today. The number of Tetra Pak carton packages collected for recycling increased from 32 billion in 2010 to 49 billion in 2020, equivalent to an overall recycling rate of 27%.

However, much still needs to be done. The COVID-19 pandemic led to an increase in at-home consumption and, potentially, in the number of used carton packages available for collection and recycling. It also served to highlight the gaps between those markets with good source segregation systems and practices and robust systems for collection and sorting, where there is evidence of recovery levels increasing, and those where infrastructure is still lacking.

This in turn emphasised the importance of continuing our efforts to develop collection and recycling infrastructure in all of our markets where we operate. Today, more than 70 Tetra Pak colleagues are focused on driving collection and recycling advancements across markets, including by:

- Expanding effective collection and sorting systems
- Expanding recycling capacity, technologies and end applications
- Driving systemic advancements and strategic industry collaboration.

The experience, expertise and network we have developed over the years is crucial to accelerating our work. In particular, when it comes to advancing collection and recycling on the ground, partnership is the game-changer.

Industry partnerships

What we did in 2020

In 2020, we continued to play an active role in the top recycling and circularity industry initiatives. Many of these were set up in 2019 in response to the increased focus on extended producer responsibility worldwide and to the Single Use Plastic Directive in Europe, and became fully operational in 2020.

The 3R Initiative

The 3R Initiative (3RI) was created with the mission to catalyse zero plastic waste leadership. The initiative supports a market for plastic credits that will sustainably increase the value of plastic and carton package waste, and incentivise new activities that support the circular economy. Tetra Pak is a founding member, together with Nestlé, Danone, BVRio, Verra, and other NGOs and service providers.

Over the past two years, 3RI has developed an “ecosystem” of components that include the Guidelines for Corporate Plastic Stewardship, the Plastic Waste Reduction Standard, managed by Verra, and the Circular Action Hub, which connects circular action projects and initiatives with corporates. The Circular Action Hub hosts projects certified to both 3RI's Plastic Standard as well as to the Circular Credits Mechanism, developed by BVRio, a system of performance-based payments for environmental services.

Pedro Moura Costa,
CEO, BV Rio



We are excited with the initial uptake of the Circular Credits Mechanism (CCM). Since its launch last year, we have more than 50 projects in 25 countries adopting the CCM standard. We are also glad to be using these networks and experience to assist Tetra Pak in testing new investment models to drive advancements of collection and recycling infrastructure in countries where EPR is increasingly considered.

The Consumer Goods Forum

We are a proud member of the CGF Plastic Waste Coalition for Action, along with 40 of the world's leading brands and retailers. We are a member of all workstreams, including on packaging design, EPR and chemical recycling. In 2020, our work as part of the coalition included:

- Finalising the first two in a planned series of “golden design rules” aimed at accelerating progress towards the Coalition's aim of using less and better plastic, in line with its commitment to the Ellen MacArthur Foundation New Plastics Economy, and reducing the complexity of the recycling process.
- Signing a memorandum of understanding with the Packaging and Recycling Association for Indonesia's Sustainable Environment (PRAISE) to explore ways of accelerating recycling in the country and support the scaling up of industry action.
- Endorsing the Forum's position paper on EPR (see **Spotlight** story).
- In the chemical recycling workstream, we are exploring how chemical recycling can play a role in a circular economy for plastics to increase recycling rates, as well as recycled content. We are looking at opportunities and challenges in the development of chemical recycling to understand how it can be developed under credible, ethical, safe and environmentally sound conditions.

4evergreen

We are a founding member of 4evergreen, an industry alliance of 59 members that aims to boost the contribution of fibre-based packaging in a circular and sustainable economy by raising awareness of the benefits of fibre-based packaging materials, advocating for EU legislation supporting product design for recyclability and supporting the development of optimised collection systems and appropriate recycling infrastructures. In December, it was announced that Tetra Pak would be joining the organisation's steering group to represent packaging producers and converters, along with ECMA and Seda Group.



Tetra Pak contributes to GRACE's activities through the extensive knowledge provided by local and global team members that helps to advance the interests of the industry and position cartons as a safe, circular, and sustainable packaging solution. In collaboration with other partners, the company also provides critical strategic insight and input into the direction and focus of GRACE at a global level.

Melina Raso,
GRACE Alliance Manager



Global Recycling Alliance for Beverage Cartons and the Environment

We joined forces with leaders from suppliers and competitors including BillerudKorsnäs, Elopak, SIG Combibloc and Stora Enso to form GRACE, of which we are also co-chair. The new organisation will build on the work done by ACE – of which we are also members – but will now operate at global rather than European level.

GRACE brings together producers of carton packages, liquid paperboard and similar paper-based packaging to promote their products' assets and increase effective collection and recycling worldwide. GRACE's work spans advocacy and communications, as well as focusing on strategically important national markets, bringing partners together to collectively identify and address recycling-specific issues.

Regional and local alliances

We are also active members of regional and local organisations that are working to scale up recycling. Teams have a mandate to represent Tetra Pak in forums or organisations driving recycling on the ground.

[Read more about our work to drive recycling on the ground on our website](#) 

Jori Ringman,
Director General of the Confederation
of European Paper Industries (Cepi)



Tetra Pak is an integral part of the 4evergreen alliance, the enhanced packaging types that it offers expand the possibilities of fibre-based packaging, and their active collaboration with other members is driving us towards increasing the overall recycling rate of fibre-based packaging to 90% by 2030.

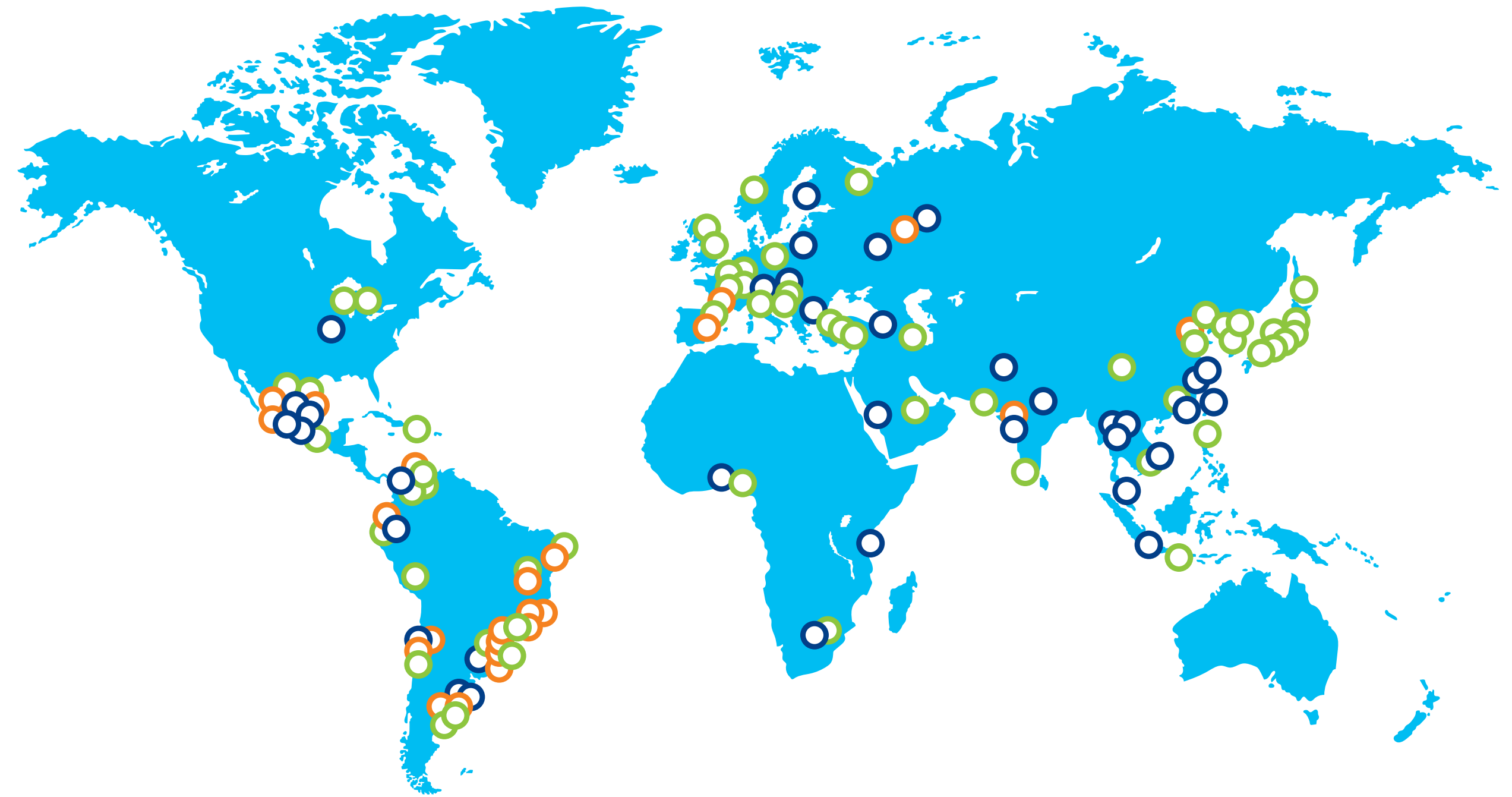
Working with customers

We work closely with our customers to help them achieve their own ambitions for collection and recycling, including by:

- Working with them to scale up collection and recycling in prioritised markets through our partners and existing platforms.
- Continuously updating and consulting with them on our development roadmap and portfolio strategic direction to ensure alignment around future packaging.
- Integrating sustainability information, such as recycling messages on-pack and online, to help drive new behaviour and understanding.
- Collaborating on advocacy initiatives, including participation in associations and other platforms, in order to foster communication and engagement.

Over the past year, we have been developing a Recycling Collaboration Framework model. This practical framework is designed to guide account teams across the organisation in working with customers to raise consumer awareness and drive behaviour change around recycling, and to help boost collection and recycling collaboration on the ground.

[Read more about our work to drive recycling on the ground on our website](#) >



90 fibre ○

37 polyAI ○

45 integrated ○

Locations are approximate

Spotlight

Extended producer responsibility and collection for recycling

Extended producer responsibility (EPR) is defined by the OECD as an environmental policy approach under which producers' responsibility for a product extends to the post-consumer stage of its life cycle. EPR policies are characterised by the shifting of financial and/or physical responsibility for the treatment or disposal of post-consumer products upstream towards the product and away from municipalities. In return, incentives may be offered for producers to take into account environmental considerations when designing their products.



Improving recycling programmes

Establishing and improving recycling programmes is essential to the transformation towards a low-carbon circular economy. Countries with the highest levels of recycling all have legislation in place that formalises requirements for municipal waste collection, treatment, disposal and recycling¹. In addition, EPR policy for packaging, where it exists, has proven to be an effective tool for increasing recycling rates – though EPR needs to be applied to all consumer packaging types, not just plastics.

Tetra Pak fully supports the development of EPR schemes as a way to increase recycling of used carton packaging. We have adopted a frontline position when it comes to driving alignment and collaboration with the other players of the value chain, including brand owners, waste management companies and recyclers, other carton package producers, local authorities and government policymakers.

In 2020, we endorsed a position paper released by the Consumer Goods Forum, of which we are a member, *Building a Circular Economy for Packaging: A View from the Consumer Goods Industry on Optimal Extended Producer Responsibility*², which sets out a framework for developing and implementing EPR programmes and provides practical support for members.

Across Asia in particular a number of schemes have come into existence in the past few years and we are playing an active role in these. In China, for example, we are part of the Carton Coalition, whose members have recently agreed a cost sharing proposal and finalised reporting guidelines for recyclers. Elsewhere, including in India, Vietnam, Thailand, Indonesia and Malaysia, we are using our expertise and experience to engage with policymakers and ensure that carton packages form part of any future multi-material collection programmes. The goals of GRACE, of which we are a founding member, include boosting recycling synergies in key markets such as Australia, China, Thailand, South Africa and Russia.

We are also working with various partners to explore ways of incentivising activities that support a low carbon circular economy, for example by creating new investment platforms to strengthen or establish robust collection infrastructure in countries where it is either still developing or does not yet exist.

1. In most countries, municipal waste largely originates from households with contributions from commercial and institutional sources. It should exclude waste from municipal sewage, construction and demolition. Source: OECD]
2. Extended Producer Responsibility (EPR) (theconsumergoodsforum.com)

Scaling up recycling solutions

Carton packages are already recyclable, but we are on a journey to accelerate carton package recycling at scale globally. This is particularly true of the recovered polymer and aluminium mix polyAl, for which recycling capacity and increased value is lacking on a large scale. We are working with a growing number of recyclers and other stakeholders to develop viable and sustainable business solutions. Here are some examples of how we've been working to build capacity for polyAl recycling in Europe over the past year:

Palurec, Germany

We worked with other carton package producers to increase capacity for recycling in Germany through the Palurec¹ initiative founded in 2017 by FKN, the German association for liquid food carton packaging. Palurec's new €8m plant outside Cologne was completed in 2020, and opened for business in early 2021, with capacity to recycle 18,000 tonnes of polyAl per year, or around 50% of available polyAl in Germany.

Plastigram, Czech Republic

We worked closely with Czech-based recycler Plastigram Industries, which has developed and piloted a technology to separate out polymers and aluminium from carton packaging for recycling into new materials. Plastigram's line is scheduled to begin operation in early 2021, with capacity to recycle 16,000 tonnes of polyAl per year.

Stora Enso, Poland

We initiated a feasibility study with our supplier Stora Enso¹ to assess the viability of building a large-scale recycling line for used carton packages at its Ostrołęka Mill in Poland. The study embraces a fully-fledged recycling solution including both fibre and polyAl. With a potential annual capacity of 50,000 tonnes of used carton packages, and 16,000 tonnes of polyAl, this would represent a significant increase in recycling capacity in Central and Eastern Europe.

L-PAK, Russia

In partnership with L-PAK*, a leading Russian producer of corrugated cartons, we launched a new state-of-the-art recycling line for carton packages with an annual capacity of 12,000 tons. The paperboard component is processed into corrugated cardboard and other materials, including secondary packaging for the food and beverage industry, while the remaining polyAl is separated and sent to another recycling partner, Investal, for processing into pellets.

Lucart, Italy

In Italy, our longstanding partner Lucart continued to develop its carton package recycling capacity. Lucart already produces two tissue paper brands, both of which carry the **Fiberpack**[®] label showing that they are made from recycled carton packages, as well as tissue dispensers made from polyAl. Throughout 2020, we have been working with them on plans to install new equipment that will bring both fibre and polyAl recycling under one roof – a first in Italy – and further boost capacity, as well as enabling Lucart to produce polyAl granules for plastic pallet production.

Recon Polymers, the Netherlands

With the active support of Tetra Pak, Dutch start-up Recon Polymers BV opened its new plant at Roosendaal in the southern Netherlands in September 2020 with a capacity that will be progressively be upgraded to 6,000 tonnes of polyAl per year. Recon Polymers is actively exploring new applications for polyAl, including working with Dutch producer Fauna Birdproducts BV on a range of products sold through major Dutch retailers. Looking ahead, the plan is to increase capacity to 15,000 tonnes per year, drawing on waste materials from neighbouring countries.

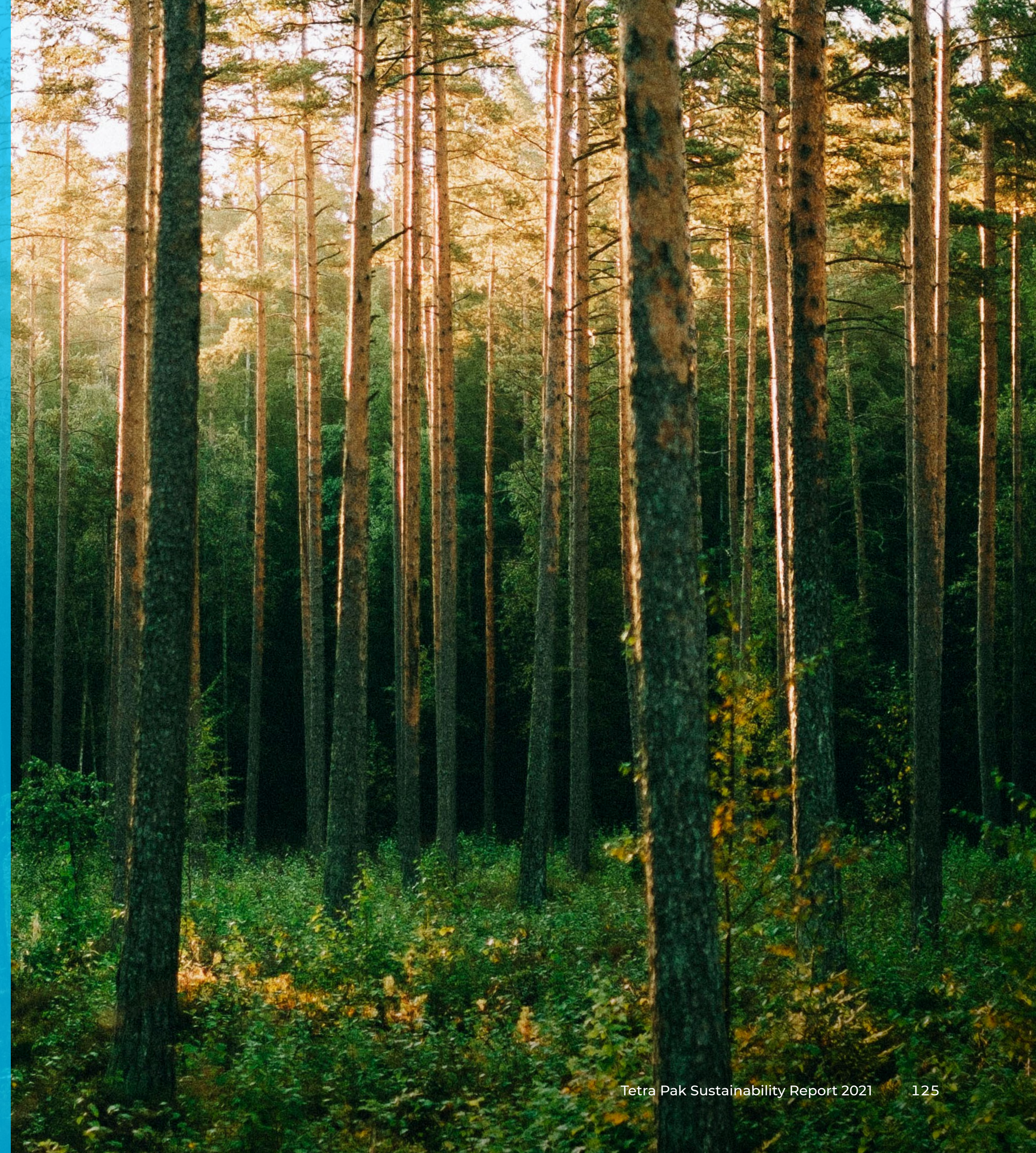
1. Co-investment project

**Accelerating
carton package
recycling at
scale globally.**



Biodiversity and forests

Our ambition is to conserve and restore forests and make a positive impact on biodiversity. We champion sustainable sourcing practices and aim to use only renewable plant-based or recycled materials in our carton packaging.

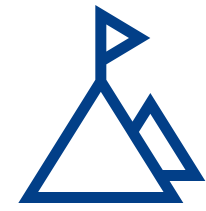


At-a-glance



Commitments

- Continue to source 100% of paperboard from **sustainably managed forests**, 100% FSC™-certified.
- Strive to maintain our **CDP Forest A-List leadership ranking**.
- Maintain **no sourcing from high conservation areas**.
- Continuously **increase the use of polymers with renewable or recycled content** targeting 20% (by weight of sourced volumes) worldwide by 2025..
- Be a leader in promoting the importance of **valuing natural capital beyond certifications**.
- Continuously improve responsible sourcing standards and pioneer new **science-based approaches**.
- Achieve a **positive impact on biodiversity** through forest conservation and nature-based solutions.



Achievements in 2020

- Received outstanding **“A” score for Forests from CDP**, the highest achievable score.
- **Ranked as a “trailblazer” by CDP** in fighting deforestation – the only company in our industry to be so recognised.
- Introduced FSC™ Chain of Custody (CoC) certification for **100% of paper straws**.
- First **Bonsucro CoC-certified carton** packages available on shelves.
- Achieved **near-100% aluminium suppliers** certified to Aluminium Stewardship Initiative (ASI) Performance Standard and ASI CoC Standard.¹
- Sold **13.5 billion plant-based packages** and **7.5 billion plant-based caps**, made from segregated plant-based polymers, fully traceable to their sugarcane origins.

1. 99.56% of our aluminium volume in 2020 was delivered by suppliers certified to ASI Performance Standard and ASI CoC Standard

Material aspect

Protecting biodiversity and ecosystems

Why it matters

Biodiversity and healthy ecosystems are critical to our very survival on Earth: they provide us with our oxygen, regulate our weather patterns, pollinate our crops, and produce our food, feed and fibre.

When plant-based materials are responsibly grown and managed, such as paperboard for our packages, they can protect biodiversity and make a positive climate impact at the same time. Forests, and their soils, play a huge role in storing carbon as well as in regulating climate, such as rainfall.

Consequently, preventing loss or degradation of forests has a significant role to play in mitigating the increasing impacts of climate change. Responsible management of forests also enables natural resource management and increases land productivity, while helping to protect habitats and reduce the spread of invasive species.





Our approach

Some 99% of the land used by our value chain comprises forests to supply our paperboard. The rest is made up of sugar cane cultivation (0.7%) for our plant-based polymers, bauxite mining areas (0.16%) for our aluminium foil, with the remainder for other uses, including our buildings.

We want to ensure that biodiversity, healthy ecosystems, high conservation values and responsible management practices exist across all land in our value chain. To that end, in addition to the requirements we apply to all our suppliers (see **Responsible value chain**), we have even stricter rules for the suppliers of the 3.1 million tonnes of **base materials** that we source for our packaging every year. These are:

- Full traceability for our raw materials.
- Certification and third-party verification.
- No direct or indirect negative land use change.
- Promote biodiversity, reforestation and regeneration.

Going forward to 2030, we aim to do even more. Our goals are to:

- Go above and beyond certification and expand partnerships to protect biodiversity.
- Make a positive impact and lead by example in forest protection and restoration.

Our sustainable sourcing strategies for each of our base materials demonstrate these existing rules and future goals.

Aluminium

About 5% of a Tetra Pak carton package is aluminium foil. To help address sustainability topics related to aluminium at an industry level, we co-founded the ASI, a global non-profit organisation that helps to set global environmental and social standards that improve aluminium production.

We have been certified to the ASI's Performance Standard since 2018 and were one of the first industrial users of aluminium to demonstrate sustainable sourcing of this material.

To see our latest environmental performance data, including on raw materials and sourcing, go to our website [➤](#)

Dr Fiona Solomon,
ASI CEO



As a founder member of ASI, Tetra Pak has long been a leader in collaboratively fostering the responsible production, sourcing and stewardship of aluminium. Their ongoing support continues to help us achieve our vision to maximise the contribution of aluminium to a sustainable society, including establishing multi-stakeholder development of Performance and Chain of Custody Standards that address GHG emissions, water use, biodiversity, OHS and human and labour rights, and driving uptake of certification.

Paperboard

Around 70% of a Tetra Pak carton package is paperboard. All of our paperboard comes from wood from forests certified to FSC™ standards and other controlled sources. With 25 years' experience, FSC™ is widely recognised as the highest global certification standard for forest management. Its logo is well known to consumers and confirms that the forest is being managed in a way that preserves biodiversity and benefits the lives of local people and workers, while ensuring it sustains economic viability.

We launched the world's first FSC™-certified carton packaging in 2007, and we have been actively encouraging our customers to display the logo on their packages ever since. In March 2019, we passed the milestone for 500 billion packages carrying the FSC™ label. In 2020, we extended FSC™ CoC coverage to include our new paper straw, which was launched in 2019.

Moreover, we are currently one of only eight companies in the world to be included on the Forest "A-list" of CDP's annual environmental disclosure and scoring process, widely recognised as the gold standard of corporate environmental transparency, identifying us as a leader in preventing deforestation in supply chains via sustainable sourcing.

The FSC™ Mix label we currently use allows FSC™ Forest Management certified material (at least 70%) to be mixed with other materials in FSC™-labelled products under controlled conditions. Going forward, in line with FSC™ strategy to expand global certification coverage, our ambition is to apply the highest level of certification everywhere.

In line with our ambition to go way beyond certification, in 2018 we initiated a tailor-made initiative together with Rainforest Alliance (RA) to gain further insights into our paperboard supply chain, all the way back to the forest management. In 2019, we successfully completed our first intelligence-gathering project with our North American suppliers, thanks to the active involvement of RA.



Over a decade ago, Tetra Pak chose FSC™ certification to responsibly source forest materials for their cartons, providing credible confirmation of their environmental and social commitments. Since then, we have worked together to promote sustainable forest management worldwide through the FSC™ label. Recently, Tetra Pak reached 100% availability of FSC™-certified material, a major milestone that reflects their strong commitment to forests and biodiversity. We are very pleased to continue our collaboration and look forward to supporting future initiatives that benefit forests, people, and the environment.

Jeremy Harrison,
Chief Markets Officer,
FSC International



Polymers

About 25% of a Tetra Pak carton package is comprised of polymers. As an alternative to traditional fossil-fuel based polymers, we are working hard to deploy more packages containing plant-based polymers as we continue to move towards low carbon, renewable sources.

As we add more sugarcane to our supply chains, so we need to manage any potential environmental risks resulting from its cultivation. That's why we were the first in our industry to require Bonsucro CoC certification for the sourcing of all plant-based polymers for our packages. All our plant-based polymers are fully traceable to their sugarcane origins. Bonsucro standards follow environmental, social and economic principles, promoting biodiversity and efficiency, human rights and labour standards. Since early 2020, all our products made from plant-based polymers are delivered to our customers as Bonsucro-certified, and can carry the Bonsucro label.

Danielle Morley,
CEO,
Bonsucro



Bonsucro convenes the sector to accelerate sustainability in the production and uses of sugarcane. Working with Tetra Pak to achieve third-party certification and product labelling of their sugarcane-derived packaging is a milestone. Customers can be assured that our rigorous sustainability standard has been met. We are very excited to continue to support responsible sourcing at Tetra Pak and for the contribution that certified sustainable sugarcane can make to plant-based packaging.



A landscape approach to standards

In 2020, we joined a new research project called “Outcome-based standards – a landscape approach”, supported by the Swiss State Secretariat for Economic Affairs (SECO). This is being co-led by Bonsucro and the University of Minnesota on behalf of ISEAL, a global membership organization for credible sustainability standards. It involves a broad coalition of partners, including two additional voluntary standards, Diageo and PepsiCo. The project explores how standards can take a science-based approach and adapt to different environments by using locally informed metrics to maximise impact. The project will develop a geospatial tool that will allow stakeholders to explore the impact of standards adoption in “real-time” and inform decision-making. In addition, the economic benefits and costs of voluntary sustainability standards (VSS) adoption will be identified, and standards will be linked to the United Nation’s Sustainable Development Goals.

It will assess a variety of VSS to fully understand regional “hotspots” in terms of environmental and economic opportunities and challenges. It will also summarise results at the regional and country-level and evaluate VSS performance against the national-level SDGs for South Africa, Mexico, Brazil, China, Malaysia, Indonesia, and India and identify opportunities and challenges given local context. This country-level analysis will pilot the development of country-level VSS indicators to explore the interplay between standards and net-environmental-impacts.

The approach will look at yield, water use, nutrient loading, greenhouse gas emissions, land use change, habitat loss, and economic costs. The models can then be used to evaluate the potential impact of different mitigation policies such as adopting certification standards, deforestation-free commitments, and policy influence. The geospatial tool will allow decision makers to evaluate different policy scenarios and prioritise future activities to minimise risk while maximising outcomes in a cost-effective way.

What we did in 2020

Plant-based caps and packages

In 2020, we delivered 7.5 billion plant-based caps, representing 22.4% percent of total closures sold – up from 5.2 billion and 15.8% respectively in 2019. We also delivered 13.5 billion packages with plant-based polymer coatings, up from 12.6 billion in 2019.

Bonsucro certification

As from March 2020, all our products made from plant-based polymers are now delivered to customers as Bonsucro certified and can carry the Bonsucro-certified label.

ASI standards

As of 2020, 99.6% of our aluminium volume is delivered by suppliers certified for the ASI Performance Standard, which addresses GHG emissions, water use, biodiversity, human and labour rights, and OHS. These suppliers are also now certified for ASI CoC, which enables a link between verified ASI Performance Standard practices at successive steps of the supply chain.

Sourcing intelligence studies

In order to meet our goal of going above and beyond certification, we commissioned two sourcing intelligence studies in 2020. Such studies give us an external, impartial review of the certification and standards we use to ensure sustainable sourcing, how they have been implemented in our sourcing landscapes, and provide valuable input to help drive continuous improvement, both for our suppliers and verification organisations.

The first study focused on the sourcing of sugar cane, the raw material for our plant-based polymers. It was carried out by Preferred by Nature (formerly known as Nature Economy and People Connected, or NEPCo), an international non-profit organisation working to support better land management and business practices that benefit people, nature and the climate. The five-step process consisted of: engage the supply chain; map the raw material supply chain; develop a risk assessment methodology and conduct risk assessment; evaluate existing risk mitigation strategies; and deliver report and recommendations.

A ground-breaking project in terms of supply chain transparency and methodology it serves as a model of how to conduct risk assessments on any crop/commodity.

The second study focused on our wood supply in the Nordics and Russia, and was carried out by the RA. The main outcomes were greatly improved knowledge of the specific geographical locations in the wood supply chains of our Scandinavian and Russian paperboard suppliers, which was subsequently integrated into our annual risk assessment to further refine our approach to working with suppliers, for example around High Conservation Areas.

Working with suppliers

Biodiversity goals are a part of our “Join us in protecting the planet” environmental sustainability initiative, which calls out actions for suppliers to work towards between now and 2030 with the overall aim of reducing GHG emissions (see the section on **Responsible value chain**).

Next steps

Reducing land use impact

We will continue to engage constructively with our value chain partners and leading conservationists to ensure that biodiversity can be protected when the demand for plant-based materials increases, for example by increasing sustainable land productivity.

ENZO project

There is still work to be done to make our operational environment impact governance even better and to ensure standardised, “joined-up” ways of working across all parts of the organisation. To that end, we have established a new Environmental and Net Zero Operations (ENZO) project, which will also help us on our journey towards our 2030 ambition of net-zero climate impact in Tetra Pak operations by ensuring/establishing:

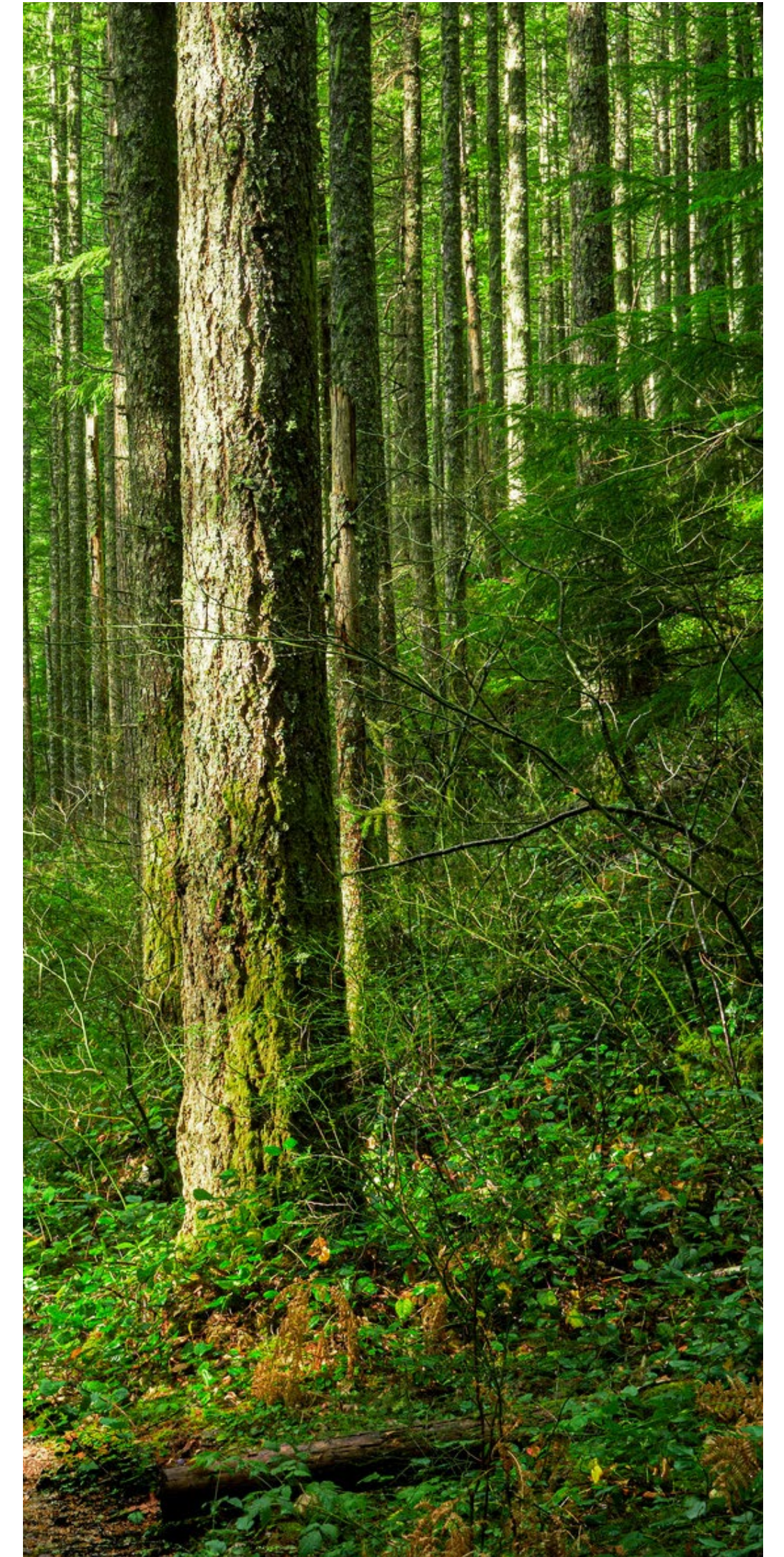
- Enhanced governance for environmental impact management
- Standardised work and structure for target deployment and reporting
- Company-wide awareness of environmental performance, ensuring a culture that strives for zero environmental incidents and impact.

Transparency and traceability

We are exploring a variety of new technologies used to increase transparency and traceability in supply chains, allowing for real-time tracking of environmental, social and governance metrics. For example, technologies like remote sensing are used to provide data that can be analysed with artificial intelligence.

Nature-based solutions

As part of our goal to make a positive impact, we are exploring nature-based solution projects, which will have material benefits including promoting biodiversity, ecosystem regeneration, local communities and indigenous peoples, and combating climate impact and deforestation.



Spotlight

Protecting Ghana's Atewa Forest

Tetra Pak has played a key role in protecting Ghana's Atewa Forest, a biodiversity hotspot, from bauxite mining. As a result of our request, all of our aluminium foil suppliers have confirmed that they will not source aluminium that originates from bauxite mined from the endangered forest.

We were alerted to a local campaign to protect the forest from mining in late 2020. Soon after, together with BMW Group and Schüco International, we co-signed a public letter expressing our concerns over the use of bauxite sourced from this vital biodiversity area. While recognising the need for Ghana's economy to develop in order to provide a good quality of life for local people, we wanted to address the urgent need for the effective management and responsible sourcing, production and stewardship of natural resources, not least aluminium.

In this regard, we have gone beyond the high environmental and social standards set out by the ASI, of which Tetra Pak is a founding member. No matter how high the environmental standards that are applied, any form of mining at this site will have an unavoidable destructive impact on the values inherent in such a natural habitat.

More than 5 million Ghanaians depend on Atewa Forest as their source of clean drinking water, which is also home to at least 50 mammal species, more than 1,000 species of plants, at least 230 species of birds and more than 570 butterflies – including species found nowhere else in the world. If plans to mine the area were to go ahead, it would lead to a total loss of the forest in the mined areas, along with all the biodiversity it contains.

The campaign to protect the forest gained a massive boost when actor and environmental activist Leonardo Di Caprio tweeted his support for our co-signed public statement, engaging his more than 20 million Twitter followers. His post perfectly illustrates the need for conversations to balance development with the need to protect biodiversity and local ecosystems.

“Following our public statement, we also asked all of our suppliers to confirm 100% that their aluminium is not coming from Atewa,” said Tina Björnestål, Material Project and Supplier Manager, Supply Chain Operations Base Material. “We have also been assisting the ASI with establishing where aluminium originating from Atewa could end up, so our confirmation from suppliers helps with that too.”

Julian Fox, Sustainable Sourcing and Operations Director, said this is a case in which we are choosing to go beyond current ASI standard requirements to ensure responsible sourcing that protects the planet.


“Somewhere that is such an obvious biodiversity hotspot should be protected, especially when there are so many communities that depend directly on the forest,” said Julian. “Our sustainable materials sourcing strategy sets a baseline for certification to voluntary sustainability standards such as ASI, which include a focus on high conservation values (HCVs) – that is, ensuring that activity does not have a negative impact on biodiversity.

But that's just the starting point and then it's about going beyond certification where we see the need to reduce risk of negative environmental and social impacts further. With Atewa Forest, this is an example of one of those 'going beyond certification' cases we believe is vital to prioritise.”

Johan Olausson, Sustainable Sourcing Driver, said certification standards such as ASI and FSC™ are helping to raise the bar for sustainability across our industry.

“Certification systems like ASI and FSC™ are laying down a certain benchmark for companies to achieve,” he said. “In this case, with Atewa, it's brilliant because Tetra Pak and other companies insisting on ASI certification are driving a meaningful change. Certification is a living document in a way, which constantly needs to develop, to meet the needs of the planet.”

Johan reflected that when we helped found ASI, the initiative almost failed because many companies thought the requirements were too tough. “Years later, it is wonderful to see such a big, global movement for protecting the planet starting,” he said. “It shows what a long-term journey this is, and that we can only do this in partnership.”

A wide-angle photograph of a lush, green forest. The trees are dense and layered, with a misty or hazy atmosphere in the background. The foreground shows the tops of trees, while the background fades into a soft, greyish-white mist. A bright blue rectangular border frames the text on the left side of the image.

**Protecting
biodiversity
through
responsibly
sourced
materials.**

Water

Our ambition is to make a positive contribution to global water resilience by pursuing a robust approach to water management across our operations and the full value chain.



At-a-glance



Commitments

- Achieve **50% less water consumption** in the best practice lines provided to our customers by 2030 (compared with 2019).
- **Reduce water use in our own operations** by 2030.
- Continue to ensure that suppliers are working proactively on **water management improvements** in their operations.



Achievements in 2020

- Established **Water Consumption Reduction** programme to provide a focus for our water management efforts.
- Increased visibility internally for the **importance of water stewardship** through our annual Excellence Awards, which recognise outstanding achievements by teams and individuals within the organisation.
- Trialled dry CIP, using air jets and vacuums in place of water and chemicals to **clean equipment to the highest standards**.
- Launched the **Tetra Pak® Cooker Stretcher DDA** dry cooker, **saving more than 3.2 million litres of effluent water annually**.
- Supported customers such as Coca-Cola in Brazil in achieving **significant water savings** by using membrane filtration technology to produce a tea concentrate that is three times more concentrated than before. See **spotlight** story for details.

Material aspect

Maintaining fresh water availability

Why it matters

Today, more than 2 billion people globally are living in countries that are under excess water stress. Some 3 billion live without access to adequate sanitation, and some 70% of global freshwater use is driven by agriculture.

The need for proactive management of this precious resource is becoming ever more critical, as climate change leads to a growing number of water scarcity hotspots and stricter regulations on sustainability issues – including water management – emerge.

Water use is a key concern for food producing industries, and there is evidence that water may soon become a limiting factor for some of our customers. Many are already setting ambitious targets for water reduction: for example, The Coca-Cola Company is already exceeding its target of replenishing 100% of the water used in its operations, while Nestlé aims to have all its water bottling sites certified to Alliance for Water Stewardship Standard by 2025 and Fonterra has set a goal for 100% of sites to be treating wastewater to industry-leading standards by 2026.



Our approach

We take a value chain approach to reducing water consumption, just as we do to the reduction of GHG emissions. We have a strong focus on responsible sourcing and work with our suppliers on continuous improvements in the areas of human rights, labour standards, ethics and the environment. All our centrally and locally managed suppliers must endorse the Tetra Pak Code of Business Conduct for Suppliers and comply with its requirements. This code is based on the ten principles of the UN Global Compact, which we consider to be fundamental standards. For more on this, see the section on [Responsible sourcing](#).

We want to leverage on this to explore additional opportunities to jointly address challenges of water management. We are working to explore further areas of collaboration, identify partners and define targets.

Promoting water stewardship is a key management process for our suppliers of our base materials. It is also embedded in the standards of the organisations we use to certify the base materials we use, notably FSC™ for paperboard, Bonsucro for plant-based polymers and ASI for aluminium (find out more in the section on [Biodiversity and forests](#)).

In our own operations, the amount of water we use is modest. Nevertheless, we seek to minimise usage as far as possible, including through the application of WCM principles. Examples of water conservation include the collection of rainwater and condensate water from air handling units and the installation of sensor-controlled and low-flow water taps.

Our converting factories account for the largest percentage of water use, followed by those operations that assemble machines and equipment. Water usage is a criterion in all new building projects and major fit-outs. Where possible, we now aim for Gold level certification from LEED, a leading international certification standard, which includes water efficiency and conservation. For example, our new LEED Gold-certified aseptic carton packaging material factory in Binh Duong, Vietnam, saves between 42% and 66% of water per building and 100% outdoors.

We measure and report on our total corporate water use, our water use by source and our water use intensity in packaging material production. [See our website](#) 

Supporting our customers

We are committed to supporting our customers as they strive to reduce their water use and meet their own sustainability ambitions, including through the work of our dedicated Water Centre of Expertise, established in Denmark in 2019. In our work with customers, we focus on three key areas:

Avoid

Through our strong commitment to innovation, we continue to drive the development of water-efficient processing and packaging equipment designed to avoid excess water consumption. For example our eBeam technology delivers significant water savings by using electron beam technology to sterilise packaging materials rather than hydrogen peroxide solution.

Optimise

We work with our customers to optimise performance of existing equipment by providing automation and information solutions such as **Tetra Pak® PlantMaster equipment** and through the expertise of our Expert Services team in areas including water consumption assessment and cleaning optimisation.

Recover

Water can be recovered during a number of processes, including from the whey produced in cheese production, the permeate created during milk production or as condensate (see [Spotlight](#) story). This recovered water can then be used in a variety of different ways, depending on its quality. In some countries, the very purest can come into contact with products, while lower quality water can be used for cleaning of floors and surfaces. Other uses including cooling and flushing, and cleaning in place of equipment.

We also work with customers on wastewater treatment initiatives, to ensure that any water that cannot be recovered and reused in the production process can be discharged safely into the environment.

What we did in 2020

Water consumption reduction

We took a major step forward in our water management efforts with the launch of our Water Consumption Reduction programme. The launch builds on previous work in framing our future strategy for water stewardship and establishing water consumption reduction as part of the sustainability pillar within our Strategy 2030. Next steps include carrying out a full value chain study and pursuing prioritised reduction activities.

Excellence Award winner

We increased visibility internally for the importance of water stewardship through our annual Excellence Awards, which recognise outstanding achievements by teams and individuals within the organisation. Our first ever Processing Solutions & Equipment Excellence Award for sustainability was won by the Fonterra Wastewater Project team.

The team took on a challenging brief from our customer, New Zealand's biggest dairy co-operative, to help them safeguard natural resources across the value chain. In response the team used their process engineering and project management expertise to develop a solution that treats wastewater at Fonterra's manufacturing plants, meeting high wastewater quality targets and minimising the impact of discharges into the environment.

The project has strengthened our partnership with Fonterra and helped pave the way for other solutions in our portfolio to meet the ever-increasing demands for more sustainable food processing, while the award itself reflects the growing importance of sustainability initiatives to our business.

Dry CIP trials

We trialled dry CIP, a disruptive technology that uses a combination of air jets and vacuums to deliver a more sustainable method of cleaning powder mixers. In addition to eliminating consumption of water and chemicals, dry CIP improves product safety by reducing the risk of contamination from human intervention, as well as reducing operational cost and increasing equipment availability.

New Cooker Stretcher for cheese

We launched the **Tetra Pak® Cooker Stretcher DDA** dry cooker, one of a number of new state-of-the-art lines for cheese manufacturers. By using patented heated auger technology it eliminates cook water associated with traditional wet cooker stretcher methods, saving more than 3.2 million litres of effluent water annually as well as reducing energy consumption and boosting yields.

[Read more about best practice lines for cheese on our website](#) 





Spotlight

Saving water through filtration technology

Membrane filtration systems are a vital element in the production of a range of food and drink products, from cream cheese to infant formula to tea. We are continuously working to ensure that our filtration systems are optimised to reduce consumption of both water and energy. Our Green Flush software solution, for example, is cutting the amount of water used during flushing by up to 40%. By monitoring the interaction between feed pressure and loop pressure, flow rates can be minimised and flushing times reduced, leading to lower flush water consumption.

We are supporting our customer Coca-Cola in Brazil in achieving significant water savings as well as reducing transportation costs by using our membrane filtration technology to produce a tea concentrate that is three times more concentrated than before. This dramatically reduces the volume of liquid that needs to be moved from the tea extraction factory to the final beverage plant, while the water yielded as permeate can be circulated back into the tea extraction system. The project has the potential to reduce water consumption by 66% and to cut costs by a similar amount, leading to a potential saving of 600 tons of CO₂ annually.

Other areas of focus include finding ways to utilise the water left over from processes such as the concentration of milk for milk powder or fruit for various foods and beverages. Using membrane filtration, the excess water can be treated to a quality that allows it to be used in food processes where it is in direct contact with the product itself. Membrane filtration can also be used to standardise water to a specific quality and composition, e.g. with regard to the levels of minerals present, again avoiding waste.

During the cleaning process, filtration can help to recover both product – thus reducing food loss and waste – and water. Typically white water – the first flush water produced during cleaning of milk processing equipment – contains up to one-third product. By means of filtration, valuable milk solids from this flush water can be recovered and treated for further use, while the water itself can also be re-used.



Rachel Kyte,
Dean, The Fletcher School at Tufts University, Sustainability
Advisory Panel member



Over the course of the period covered by this report we have witnessed a political alignment around recovering from the COVID-19 pandemic in a way that protects nature and urgently responds to impacts of climate change. The pandemic also forces a greater focus on inequality as we learn that we cannot protect ourselves without protecting others. At the crux of our response is the need to build resilience and to shift value chains so that they are nature positive and climate neutral. Sustainable value chains that can support everyone to have access to healthy diets are now understood to be vitally important. This report shows how, as we begin to see scaled response to the urgency of scientific warnings, Tetra Pak has internalised the enormous challenges of waste, nature's destruction and climate change and begun to address in large ways and small and to redefine what success means for its ubiquitous carton.

